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TECHNICAL REPORT NATICK/TR-81/012

# SELECTED BIVARIATE FREQUENCY TABLES: U.S. ARMY MEN AND WOMEN

Thomas Churchill
Kathleen M. Robinette
and
Glen Potter
I
Anthropology Research Project

Yellow Springs, Ohio

January 1981

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UNITED STATES ARMY
NATICK RESEARCH and DEVELOPMENT LABORATORIES
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Bivariate tables graphically portray the relationship between two dimensions and have traditionally played an important role in the use of anthropometric data by clothing and workspace designers. Published in this report, for the first time, is a set of bivariate tables in which men's and women's data are presented in comparable form, with the same units, the same interval widths, and the same interval endpoints. This presentation of the data will facilitate the use of the bivariate tables for design problems which involve

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#### PREFACE

This report was developed in response to the requirements of contract DAAK60-79-C-0097 with the U.S. Army Natick Research and Development Laboratories. Mr. Robert M. White served as contract monitor and played an active role in the selection of the bivariates.

The authors are grateful to Ms. Ilse Tebbetts for carefully organizing the report, to Ms. Jane Reese for utilizing her expertise in preparing the manuscript for publication and to Dr. John T. McConville for his guidance.

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### SELECTED BIVARIATE FREQUENCY TABLES: U.S. ARMY MEN AND WOMEN

#### INTRODUCTION

Fundamental to the successful design of Army clothing is a working know-ledge of the relationships of human body dimensions to one another. While a staggering number of measurement statistics are available, their very abundance may well prove somewhat defeating to the clothing designer faced with the task of designing a variety of clothing for men and women, determining how many sizes will be necessary to accommodate the target population and, finally, determining how many of each garment will be required.

Among the most practical and useful ways of displaying information dealing with the multiplicity of relationships between clothing-related dimensions, and demonstrating at the same time the degree to which they relate to one another through the whole range of the population, are bivariate frequency tables. These tables show the range of any two given dimensions and present a graphic overview of how the subject population distributes itself across that range. They provide a means for deciding how many sizes will be needed depending on the size intervals selected and, once graphically divided into size categories, they show how many garments of each size will have to be provided.

While some bivariate tables for Army men do exist, they are unpublished and not easily accessible to designers. A number of bivariates based on Army women's data were published (Churchill, T. et al., 1977)\* but they are not comparable or compatible with the few existing men's bivariates. Published in this volume for the first time is a set of comparable men's and women's bivariates in which identical pairs of variables are used and presented in comparable units. The units used are inches, as opposed to the more traditional metric units for anthropometric data, and the intervals have been selected to be appropriate to designers of clothing and personal-protective individual equipment.\*\*

<sup>\*</sup>Churchill, Thomas, Edmund Churchill, John T. McConville and Robert M. White.
1977. Anthropometry of Women of the U.S. Army--1977, Report No. 3 Bivariate Frequency Tables, Technical Report NATICK/TR-77/028, U.S. Army
Natick Research and Development Command, Natick, Massachusetts. (AD A046 692)

<sup>\*\*</sup>The problems inherent in the translation of anthropometric data measured in metric units to inch and fractional inch bivariate tables and the resolution of these problems have been described in Churchill, T. et al., 1977.

#### Use of Bivariate Tables

The anthropometric bivariate table is a tabular method of displaying simultaneously two normally distributed variables on a single table. In Table 1 a typical anthropometric bivariate is shown for the dimensional variables of crotch height and hip circumference. The table is divided vertically and horizontally by lines to create a matrix of cells. On the vertical or Y axis the cells represent hip circumference values, and the numbers on the extreme left of the table designate the beginning and end value of hip circumference for each of the intervals or rows. The numbers on the extreme right of the table designate the number of individuals in each row.

Given on the X or horizontal axis is a similar tabulation for crotch height with the beginning and end points for each column given in intervals of one inch. The figures at the bottom of the table are the column summations for the number of subjects in each of the intervals of crotch height. At the extreme lower right is the summation of the rows and columns which is the total sample size.

The number in each bivariate cell represents the number of subjects who fall within a particular one inch of hip circumference and a particular one inch of crotch height. Thus, it will be seen that 241 individuals out of the 1,330 subjects in the total sample have a hip circumference which falls between 37.0 and 38.0 inches. Some 308 individuals of the total sample have crotch heights which fall within the inch interval 29.0 to 30.0 inches.\* Of these individuals, 69 have a hip circumference between 37.0 and 38.0 inches and a crotch height between 29.0 and 30.0 inches.

Below the bivariate tables are two lines of data which give the total sample mean and standard deviation for each variable, as well as the correlation coefficient (R) which expresses the relationship between the variables. Also appearing below the bivariates are regression equations for predicting one variable from a specific value of the other plus their associated standard errors of the estimate. The R value indicates the degree to which the tabulated dimensions correlate with each other; that is, the extent to which changes in one dimension predictably reflect similar changes in the other. On a scale of 0 to 1.0, where 1.0 is a perfect correlation, the .861 correlation between crotch height and stature (Table 24, page 41) is considered high; variables with an R of .5 are thought of as moderately correlated; and R=.260, as in Table 1, shows a poor correlation. A quick glance at the pattern of numbers on a bivariate can give an immediate visual clue as to how well the two variables are correlated. Poorly correlated variables show up in a roughly oval pattern (as in Table 1). Well-correlated variables appear in a neat band which usually rises diagonally from left to right

<sup>\*</sup>It would appear from the interval designations that an individual who is exactly 37.0 or 38.0 inches in hip circumference could fall in either of the adjacent columns. In the actual preparation of these tables, the interval is designated as 37.0 through 37.99 inches so that no overlap of interval beginning and end points occur and each individual occupies one and only one position in the table.

TABLE 1

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND HIP CIRC 1977 ARMY WOMEN

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36,0   36,</td><td>  24,0   26,0   26,0   27,0   28,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   37,0   36,0   36,0   37,0   36,0   36,0   37,0   36,0   36,0   37,0   36,0   36,0   37,0   36,0   37,0  </td><td>24,0   26,0   26,0   27,0   28,0   29,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   37,0   36,0   37,0   37,0   36,0   37,0  </td><td>  24,0   26,0   26,0   27,0   28,0   39,0   31,0   32,0   33,0   34,0   36,0   37,0   37,0   37,0   38,0   37,0  </td><td>  24,0   26.0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   37.0     63.0   63.0   63.0   63.0   63.0   63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0   63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0     63.0   63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0   63.0   63.0     63.0</td><td>63.0         26.0         27.0         28.0         30.0         31.0         92.0         93.0        
93.0         <td< td=""><td>24,0         26,0         26,0         27,0         28,0         31,0         31,0         33,0         34,0         36,0         36,0         37,0         <td< td=""><td>  24,0   25,0   25,0   27,0   28,0   30,0   31,0   32,0   34,0   36,0   35,0   37,0   37,0   32,0   34,0   35,0   36,0   37,0   37,0   32,0   34,0   35,0   36,0   37,0   37,0   32,0   34,0   32,0  </td></td<></td></td<></td></t<> | 24,0   25.0   25.0   29.0   30.0   31.0   32.0   34.0   35.0   37.0   35.0   37.0   35.0   37.0   35.0   37.0 | 24,0   25.0   25.0   27.0   28.0   30.0   31.0   32.0   34.0   35.0   37.0   37.0   35.0   37.0 | 24,0   25.0   25.0   29.0   30.0   31.0   32.0   34.0   35.0   37.0   37.0   35.0   37.0 | 53.0         1         1         1         1         1         1         1         1         1         1  
      1         1 | 1.0   26.0   26.0   27.0   28.0   30.0   31.0   32.0   324.0   36.0   36.0   37.0           1.0   26.0   27.0   28.0   28.0   30.0   31.0   32.0   324.0   36.0   36.0   37.0           1.0   2.0   2.0   2.0   2.0   2.0         1.0   2.0   2.0         1.0   2.0 | 53.0         1 | 24,0   26.0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0             65.0   50.0   27.0   28.0   29.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0             65.0   52.0   49.0   20.0   49.0   31.0   32.0   33.0   34.0   36.0   36.0   36.0             65.0   52.0   49.0   49.0   40.0   40.0   40.0   40.0           1 | 24,0   26,0   26,0   27,0   28,0   30,0   31,0   32,0   33,0   34,0   36,0   36,0   36,0   37,0           36,0   36,0   36,0   36,0   36,0   36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0   36,0           36,0   36,0   36,0   36,0   36,0   36,0           36,0   36, | 24,0   26,0   26,0   27,0   28,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   37,0   36,0   36,0   37,0   36,0   36,0   37,0   36,0   36,0   37,0   36,0   36,0   37,0   36,0   37,0 | 24,0   26,0   26,0   27,0   28,0   29,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   37,0   36,0   37,0   37,0   36,0   37,0  
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STD ERROR	1.66	2,39
REGRESSION EQUATIONS	= (0.181)*HIP CIRC(IN)+(23.26)	= (0.374)*CROTCH HEIGHT(IN)+(26.35)
œ	0.260	0.260
ST DEV	1.72	2.48
MERN ST DEY	30.07 1.72	37,59 2,48

(see Table 24) reflecting the fact that as one dimension gets bigger the other gets correspondingly bigger at approximately the same rate.

The regression equations which appear under the bivariates enable the reader to make a point estimate for one variable from any given value of the other. The accompanying standard error of estimate is used to construct the range of possible variance of the point estimate. We might, for example, wish to estimate crotch height for a small group of U.S. Army women knowing only that their statures are 67.25 inches. These two dimensions are depicted on Table 24 and the regression equation for predicting crotch height from stature appears below the table as follows:

CROTCH HEIGHT = (.579 x STATURE) - 7.08 STD. ERROR = .88

Plugging in the stature value of 67.25 yields:

CROTCH HEIGHT =  $(.579 \times 67.25) - 7.08$ CROTCH HEIGHT = 31.86

The best estimate for crotch height for these women is thus 31.86 inches but, as with all statistics, this becomes a probability statement with the use of the standard error of the estimate as follows: for approximately two thirds of the subject women, crotch height values are likely to fall between 31.86 inches minus .88 inches and 31.86 inches plus .88 inches (one standard error of the estimate).

#### The Survey Samples

Men's bivariate data were obtained from an anthropometric survey conducted in 1965-66 in which a total of 6,682 men were measured at 12 Army posts throughout the U.S. (White and Churchill, 1971).\* Some 1,330 subjects were measured at four locations in the women's survey in 1976-77 (Churchill, E. et al., 1977).\*\* Age, rank, and race of both samples are summarized in Table 2 below. The marked difference in sample size between the two surveys (6,682 vs. 1,330) may actually be fortuitous, as the number of women in the U.S. Army is scheduled to be approximately 15 percent of the total -- a ratio which closely approximates the mix found in these tables.

<sup>\*</sup>White, Robert M. and Edmund Churchill. 1971. The Body Size of Soldiers: U.S. Army Anthropometry-1966. Technical Report 72-51-CE, U.S. Army Natick Laboratories, Natick, Massachusetts. (AD 743 465)

<sup>\*\*</sup>Churchill, Edmund, Thomas Churchill, John T. McConville and Robert M. White. 1977. Anthropometry of Women of the U.S. Army--1977, Report No. 2 - The Basic Univariate Statistics, Technical Report NATICK/TR-77/024, U.S. Army Natick Research and Development Command, Natick, Massachusetts. (AD A044 806)

TABLE 2

DISTRIBUTION OF SAMPLES BY
AGE, RANK AND RACE

<u>Age</u>	No. of Women	No. of Men	% of Women	% of Men
50 and up	3	16	0.2	0.2
40-50	25	78	1.9	1.2
30-40	99	339	7.5	5.1
20-30	810	4,158	60.9	62.2
Under 20	393	2,091	<u>29.5</u>	31.3
TOTAL	1,330	6,682	100.0	100.0
	No. of	No. of	% of	% of
Rank	Women	Men	Women	Men
Officers	343	85	25.8	1.3
Enlisted	987	6,596	74.2	98.7
NA		1	-	
TOTAL	1,330	6,682	100.0	100.0
en de la companya de La companya de la co	No. of	No. of	% of	% of
Race	Women	Men	Women	Men
White	988	5,509	74.3	82.4
Black	302	973	22.7	14.6
Oriental	25	46	1.9	0.7
Other		125		1.9
NA	15	29	1.1	0.4
TOTAL	1,330	6,682	100.0	100.0

#### The Bivariate Tables

Section I contains, on facing pages, a series of 41 comparable male and female bivariate tables displaying identical pairs of clothing-related variables. Data were generated from the Army men's and women's surveys described above and measurement techniques were studied to assure that paired tables do, in fact, represent comparable dimensions.

Some half-dozen dimensions considered important in clothing design were found to have been defined or measured differently in the two surveys. They include interscye back, neck circumference, vertical trunk circumference, waist back, waist circumference and waist height. Bivariate tables in which any of these variables appear are given in Section II for men and for women; they are usable individually but not comparable for combining purposes.

Section III contains a few bivariates which include dimensions measured only in one of the two surveys but not in the other, thus providing only men's data or only women's data for that particular measurement. These variables

include ankle height, crotch length, sleeve length, sleeve outseam, sphyrion height, and waist front. They are included because they are considered sufficiently useful for specific purposes even if limited to one sex.

Section IV contains a series of double bivariates combining the data which appear as separate men's and women's tabulations in Section I. This has the effect of closely pairing men's and women's measurements into one set of data for a more graphically visible presentation of the possibilities and problems involved in devising a combined sizing program for both men and women.

These combined bivariate tables differ from the single bivariates in that we find two entries separated by a diagonal line in each of the bivariate cells. Referring to Table 143 (page 165) for example (crotch height and hip circumference), we see the entry for the cell 39.0-40.0 inches for hip circumference and 30.0-31.0 inches for crotch height given as 47/37. The number of Army males who fall within this interval is 47 and the number of females is 37. The male entry is always on the left of the diagonal and the female entry is on the right. This placement is true for the row, column, and total summations as well.

Abbreviated descriptions of the measuring techniques used in obtaining these data are given in the Appendix. Also appearing at the conclusion of the report is an index locating all the variables used in these bivariate tables.

#### SECTION I

## Paired Male and Female Bivariates; Dimensions Comparable

TABLE 3

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND BICEPS CIRC

1966 ARMY MEN	1110 TO

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Î	37.0 38.0 39.0 40.0 41.0 42.0 43.0 44.0 45.0 46.0 47.0 48.0					က	21	38	99	16	96	31	8	4	1					339		REGRESSION EQUATIONS	1.833)*BICEPS CIRC(IN)+(13.63)	0.310)*BUST/CHEST CIRC(IN)+(1.26
BUST/CHEST CIRC(IN)	0.4					2	12	48	20	137	14	88	32	6	2			-		518		NOI	<b>#</b> B1C	#BUS
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TARLY 4

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND BICEPS CIRC 1977 ARMY WOMEN

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	46.0		-	-										H		1		ဟ		*
	45.0	+	+	-	2			H						-		-	_			2)
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	45.0 4	<u> </u> -	1			~	-	-					L			· u	<u>'</u>		)+(	11)
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	1 41.0		Ī	T	-	-	9	*	2							=		1011	CIR	EST
	40.0		$\dagger$	t	$\dagger$	-	9	8	=	3		<u> </u>	-	T		8	,	REGRESSION EQUATIONS	2.004)#BICEPS CIRC(IN)+(13.52)	0.257)*BUST/CHEST CIRC(IN)+(1.65
(X	39.0	+	+	+	+	-		1.4	22	T	_	_	-	-	-	n a	₹	NO	BIC	BUS
BUST/CHEST CIRC(IN)	37.0 38.0	+	1	╀	$\downarrow$	+		╀	┝	$\vdash$	_			$\vdash$	$\vdash$		-	<b>ESSI</b>	)4)#	57)#
HEST	17.0		1	╀	ļ	F	8	=	26	21	18	2	_	L	L	8		EGRE	2.00	0.28
UST/C	36.0 3		1				E	2	3	4.7	16	*			L	1		œ	11	<u> </u>
_	3						ما	23	20	28	43	12	-						18	18
	0 36.0					Ī	2	9	36	89	24	29	-			9	281	· 62	0.718	0.718
	34.0		T	T	1		Ī	-	139	99	43	23	2			3	721	DEV	67	83
	33.0	$\parallel$	$\dagger$	†	$\dagger$	T	T	2	2	35	63	=======================================	2	; =	6.		7	ST 0		0
	32.0	$\parallel$	+	$\dagger$	$\dagger$	t	t	l	9	~	19	17	ő		,		201		~	ထ
	31.0	$\parallel$	+	+	$^{+}$	+	+		_	-		╁	╁	╁				MEAN	34.7	10.58
	30.0	$\parallel$	$\frac{1}{1}$	+	+	-	-	L	-	ŀ		22	2	1	-	-	8			٠
	29.0		1	1		$\downarrow$	-		L	L	~	•	-	1	1	Ľ	<b>"</b>	ME	RC	
	_												-	·	1	,	<u>"</u>	¥ ×	ST (	IRC
	0 28.0														-		-	ARM	CHE	သ
•	27.0	16.0	14.5	14.0		ـــا	12.6		$\exists$		10.6			9.0	8	0.8	101	1977 ARMY WOMEN	BUST/CHEST CIRC	BICEPS CIRC
				<i>i</i>				· · · ·		J4		4						¥.,		

TABLE 5

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND HIP CIRC 1966 ARMY MEN

	O TOTAL		-			2	1	150	2	*:	04	20	122	188	339	671	785	1036	1113	1113	720	380	137	34	*	6682
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	.0 47.0							_		4	1	1	6		-											11
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- 1	44.0 45								_	3	9	2	60	۵	3	2	_									33
	43.0 44							_	1	2	11	4	21	14	on	3	3									7.0
- 1	42.0 43									1	S	14	22	31	23	23	*	ေ								130
. 1	41.0 45								2		9	13	21	31	99	30	18	8	*							186
											4	16	13	45	26	85	89	36	8	*	2					338
BUST/CHEST CIRC(IN)	39.0 40.0										-	8	17	33	78	128	122	83	34	10	<b>*</b>					518
/CHEST	38.0 39										9	2	က	16	53	128	167	175	105	53	10	2	1			712
BUS	37.0   36											-	-	8	28	102	183	239	195	107	36	+	1			911
_ h	36.0 3											-		2	15	46	136	238	303	203	83	19	2			1052
- 1	35.0 3		1											_	9	23	62	179	274	346	148	63	12	-		1111
_ h	34.0									_				-	2	3	21	29	150	227	192	109	33	S		795
- 1	33.0																*	18	33	115	164	108	37	8	-	478
	32.0 3	-	1	_		_			_								_	2	2	38	7	28	30	-		217
-	21.16	-				4	4		4										~	2	-1	=	12	-	-	63
		-	1	_	-	4	4	4	4	1		$\downarrow$		4	-		4	_	4	-	9	~	◄	9	2	12
_ F	2.5		$\downarrow$		4			4		$\downarrow$	$\downarrow$	$\downarrow$		4					_		4			7		-
	<u></u>				1-															T					T-	
	֓֞֞֜֟֝֟֓֟֝֟֟֝֟֟ ֓֓֓֞	23.0	52.0	81.0	50.0	48.0	48.0	47.0	46.0	46.0	٠		12.0	٠	_	39.0	38.0	37.0	38.0	35.0	34.0	33.0	32.0	31.0	30.0	TOTAL

1966 HKMY MEN	MERN	ST DEV	<u>م</u>	REGRESSION EQUATIONS	STD ERROR
BUST/CHEST CIRC	36,92	2,63	2,63 0,797	= (0,853)*HIP CIRC(IN)+(5,28)	1,59
HIP CIRC	37,09	2,46	2,46 0,797	= (0,745)*BUST/CHEST CIRC(IN)+(9,59)	1.48

TABLE 6

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND HIP CIRC 1977 ARMY WOMEN

	O TOTAL		<b>,</b>				1	2	3	æ	14	28	46	101	157	193	241	195	170	84	55	25	9	2	1330
	47.0	H		-	-	-													-			_			
	46.0	Н		-							1									-					-
	45.0	Н		-			-					1													2
	44.0				-		_																		
	43.0		-							1				3											8
	42.0							1	2		1	2	3	1	1										11
	41.0										2		1	4	2	1	1								11
	40.0								1	1	1	1	s	7	4	6	3								32
(NI	39.0							1		1	4	10	7	12	6	6	9	9	1						99
BUST/CHEST CIRC(IN)	38.0									2	1 1	8	2	18	17	21	10	2	5	2					93
/CHEST	37.0										3	4	10	18	36   1	29 8	37 1	15	1	1	_				
BUST	36.0			-							1	1	7 ] ]	6	36 3	55 2	57 3	23 1	15	3.					7 154
	35.0		-									1	4	9	22 3	40 E	43 E	38 2	31 1	+		1			13 217
	34.0							_	_				1	8	Н		Н	8	Н	3	2	1			193
	33.0	1											1	1	11	6 2	39 3	_	35 4		16	7	1	1	9 192
	32.0													-	1	2	9 3	18 3	28 3	23 2	6	4	1		6 179
	31.0	-											-				1	6 1	8 2	12 2	16 1	10	2	1	56 105
•	30.0													1				1	4	1 1	1 1	1	1		- Q2 - O7
	29.0															-			-			2	-		60
	28.0							•						-		-			+				_		-
	27,0	]	-											-		2   5									TOTAL
	. ]	53.0	200			9		4	2 4		_	10	_	_	d I	_	0 0	9 0	32.0	200	200	200	200		5

1977 ARMY WOMEN		ST DEV	2° C		STD ERRO
HIP CIRC	37, 59	2.48 0.707	0.707	2.48 0.707 = (0.703)*BUST/CHEST CIRC(IN)+(13.19)	1.75

TABLE 7

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SCYE CIRC 1966 ARMY MEN

	TOTAL	2	2	1.7	20	81	99	118	218	345	899	311	1048	1137	930	722	422	166	53	24	တ	*	-	6682			
	48.0	1	_		_	_		-		-			_	$\mid$	_	_	-		_	-		_		+	8088	97	96
	48.0	+		3	2	2	3	_	_				-		-	-	_	$\vdash$	-		-			13	SIN FRANK	1,97	0
	47.0		_	_	1	2	2	-		2	2	1	_	-	-		-	$\mid$				_		11	Ċ.	•	
	46.0	-		-	2	2	3	3		9	2	1	-									_		22			<b>22</b> )
	1 45.0			-	-	*	3	2	8	9	4	4	2	_							_			33		6)	•
	44.0			•	1	9	6	13	10	+	10	8	*			-								70		12.9	(NI)
	43.0			2	1	9	8	14	25	19	24	11	91		2	2					_			130	v.	1.364) *SCYE CIRC(IN)+(12.99)	0.325)*BUST/CHEST CIRC(IN)+(5
	42.0				3	8	2	16	26	30	42	29	20	3	1		3							186	NCIL	RC(I	EST
1	11.0	-		2	9	4	1	17	36	67	99	19	45	25	•	2		1	1					339 1	FOLIA	ECL	T/CH
BUST/CHEST CIRCLIN)	0.01	-		. 2		9	8	24	41	64	94	601	93	46	31	9	+	1						618	REGRESSION FOURTIONS	<b>¥</b> SCY	∗BUS
CHEST	0 39.0				1	2	1	15	32	69	98	155	143	109	19	27	8	١		2	1	1		217	S.S. HAY	364)	325)
BUST	0 38.0		1	1	2	1	8	9	22	41	104	149	208	186	97	62	11	8	2	1	1	1		911	2	_	_
	33					2	1	1	14	58	62	119	217	258	187	111	24	11	2			-		062		35	= 599
	0 36.0						2	7	2	16	36	76	184	267	238	177	80	22	9	3				1111	α.	0.665	0.66
	.0 35.						1	1	•	10	17	38	82	158	167	162	116	56	7	9	1			795	7	63	1.28
	.0 34									2	7	5	25	62	101	011	102	45	8	3	1			478	15	8	
	.0 33									1	-	9	9	18	33	20	53	32	13	၉			1	217	MFAN	36.92	.54
	31.0 32.0											4	~	*	2	12	18	11	8	9				63	E.	36	17
	30.0 31												_				+	2	3	9	-			18	z	IRC	
- 1	29.0																		-						1966 BRMY MFN	3 183	SCYE CIRC
1	<u>.</u>	Ц			$oxed{ig }$						_				ل		ogthigg		-		$\perp$		1	-	AR S	/CHE	C11
		23.0	22.5	22.0	21.5	10	20.5	20.00	2 0 0		113	_	-	_	_		12.5	200	1		- E	-	12.5	TOTAL	1966	BUST	SCYE

TABLE 8

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SCYE CIRC 1977 ARMY WOMEN

TOTAL	-	4	150	16	24	73	147	244	266	272	184	5	2	12	60			1330		STD ERROR 1.63 0.62
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47.0				,,,															,	810
46.0	  -	+	t	T		T	T	T	T	T	T	1	1					_		
45.0	$\parallel$	+	╁	+	+	+	+	+	+	$\dagger$	$\dagger$	+	-		-	$\dagger$	$\dagger$	2	1	00
44.0	$\parallel$	1	1	$\downarrow$	-	1	-	1	+	+	$\frac{1}{1}$	4	_	_	-	$\mid$	+		$\frac{1}{2}$	<b>4</b>
-	11													L	L	1	$\downarrow$			(1 C) + (2 C)
143.0	<b>1</b> 1	1	7		-	-												LC.	•	(5.
140.0		1	-	7.	1,	7	m .	_	1	1	1				T	T	T	-		S N)+ CIR
		+	+	+		+	6	2	+	1	1	_	+	$\dagger$	$\dagger$	†	1	<u> </u>	=	110N 3C(1 EST
0 17		$\dashv$	-	+	+	-	+	-		-		$\vdash$	+	+	+	+	+		$\dashv$	00B 013 113/
	¬,				2	7		6	٥			L	$\perp$	1	4	_			26	A E CYE UST
SI.	7.			1	+	က	16	17	91	9	60								92	REGRESSION EQUATIONS (2.005)*SCYE CIRC(IN)+(5.11) (0.287)*BUST/CHEST CIRC(IN)+(4.80
1	38.0			1	1	60	11	27	29	13	-		1	1					83	RES 005 287
CHES	36.0 37.0	-	-	-	_	3	12	27	28	1	9	<del> </del>	┪	1					184	RE0 12.
BUST,	98.0	-	-	-	L	-	╀	$\vdash$	+	╁	+	+	1	-		$\vdash$	$\mid$	-	$\dashv$	11 11
	35.0	L	$oldsymbol{ol}}}}}}}}}}}}}}}$		L	ľ	15	36	3 6	3 2		1	6	_	_	L	-	-	217	R 0.758 0.758
	_					-	-	٥	200	3	3 6	ž	23	_	L			1	183	0.0
	.0   34.0						-	- -	- ;	-	*	98	46	8					781	DEV 2.49 0.94
. •	33	$\ $	$\dagger$	$\dagger$	†	†	†	ţ	2		38	28	44	25		•	1		179	ST 200
	32.0	$\ $	$\dagger$	$\dagger$	$\dagger$	+	†	+	+	~	9	21	42	1 5	<u></u>	7	1	†	901	N 72 77
	31.0	H	+	+	+	+	+	+	+	$\dashv$	=	-	$\vdash$	╁	+		$\dagger$	1	<u>1</u> 29	34.72
	20.0	-11	_	4	1		4	-	-			ŀ	٢	1	$\dagger$	+	4	-		
	H	71										-	16	1		<u> </u>			<u> </u>	MOMEN CIRC
	9	-1											1	V		-			(17)	× SO
	г	2.02															-		1	1977 ARMY WOMEN BUST/CHEST CIRC SCYE CIRC
		2/2		ماره	<u>ار</u>	0:1		١		0.9	16.0	14.6 T	0.1	13.5					11.0	377 JST,
			9	0.0			-ı.	의 N		_	_		E	1	E	1		=1	<u>1</u>	N 22 22
							•	147	, -			-		-						

TABLE 9

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SHOULDER CIRC 1966 ARMY MEN

	) TOTAL		7	1	7	o	17	49	90	140	290	464	989	935	1132	1036	828	670	280	108	38	9	3	6682
	0.64 0	+	2				1	1							_									4
	0 48.0		-		4	1	5		2															13
	0.47.0	1		-	2	2	1	1		2	2													11
	.0 46.0					3	1	_ 2	9	2	2	2												22
	.0 45.0						4	9	8	9	9	4		1										33
	.0 44.0					9	7	15	12	12	15	9			3									20
	.0 43.				_			8	22	30	35	24	2	3	2	1								130
	.0 42.0						1	8	16	31	51	19	50	3	4	1								186
1K)	40.0 41							3	67	38	80	88	٤9	38	10	က	1							338
BUST/CHEST CIRC(IN)	39.0 40								9	17	90	130	154	<b>†</b> 6	38	16	2	1						618
T/CHES1	38.0   38	H			_	_	_		_		36	106	176	225	120	36	10	3	1	-				712
BUS	37.0 3				_			_	L	2	₹	38	161	269	279	115	25	13	*	_				911
	36.0 3	H		_				_	_		3	=	99	201	343	280	114	22	8	2				1052
	5.0							L		_	-	6	25	80	245	346	268	109	53	8	_	-		1111
	34.0 3												2		-	192	245	Г	89	-	2			795
	33.0			L				_				_	9	3	17	37	127	163	96	$\vdash$	*		_	478
	32.0				_		_			<u> </u>		_	2	_	2	8	34	23	63	$\vdash$	18	_	_	1 217
	31.0				_	-						L	_			2	3	13	2 13	8 17	3 12	2	2	5 63
	30.0		-									_	_	_			_	_		Ĺ		_		1 15
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	28,0			ا: او	-]•		-]«	ار جارہ	-[•	- -  -	-	- -  -	: !	- - - -	- -  -			1,2,0			200	2000	30.00	TOTAL
		22		8		מַלָּי	200	07.0			13		_		_	100	_	¥ :	•	2 6	70	S C	0 6	<u>5</u>

MEAN ST DEV R REGRESSION EQUATIONS STD ERROR	36,92 2.63 0.855 = (0.895)*SHOULDER CIRC(IN)+(-2.96) 1.37	44,55 2,51 0,855 = (0,816)*BUST/CHEST CIRC(IN)+(14,43) 1.31
ST DEV	2.63	2,51
MEAN	36,92	44.55
1966 ARMY MEN	CIRC	SHOULDER CIRC

TABLE 10

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SHOULDER CIRC 1977 ARMY WOMEN

	TOTAL		2	2	e	7	8	50	35	162	209	248	219	200	56	38	o	1	1330	
	42.0 43.0 44.0 45.0 46.0 47.0		1								_			-					1	
	0 46.0	$\ $	_	1															1	
	0 45.			1				1											2	
	.0 44.																			
	.0 43		7		1	2		1											9	
•	41.0 45				1	1	2	7.											11	
						2		9	2	1 1		1							=	-
<b>S</b>	39.0						2	2	10	2	9								32	
BUST/CHEST CIRC(IN)	36.0 37.0 38.0 39.0 40.0	$\parallel$	_		1	7	2	13	15	20	11	2			·				65	
CHEST	37.0					1	1	9	24	24	22	13	2						69	
BUST/	36.0						_	3 6	4 23	3 42	9 42	5 29	1 11	5	- 1				7 154	
	35.0								3 14	14 36	41 69	61 65	40 34	31	5			-	3 217	
	0 34.0	+							1	7	18 4	<b>20</b> 6	58	44 3	14			,	192 193	
	33.									1	6	24	48	99	23	9	2		179	
	0 32.0										1	2	22	42	29	o			106	-
	0 31.0											1	4	10	14	22	4		99	-
	0 30.0													2	+	5	1		σι	
	.0 29.0														2		1		<sub>(D)</sub>	
	27.0 28.0				ل											_	-			
	5.	49.0	18.0	7.7	78		7	٠.	_			90	٠.	_	_	H C	2 6	93	TOTAL	
							141	. / .	ď	J	æ:	v	** [4	, rri	•					

TABLE 11

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SHOULDER LTH 1966 ARMY MEN

	TOTAL		-	9	=	37	121	882	1539	1805	840	537	280	85	7	-	6682			
	-				_													02		
	49.0						-					-					+	STO ERROR	90	11
	48.0	Ļ	H	H	$\vdash$	H	H	H	$\vdash$	H	H	-	$\vdash$	$\vdash$	H	L	_	Ü	2.6	0.77
	0				ĺ	-		8	သ	9	-		-				13	510		
	47.0						2	2	2	1	3	1					11	"		
	8.0	H	_	L	L		L	L	Н	L	_	L	L			Ц				_
	0				-		2	7	7	စ	-						22		_	32
	44.0 45.0 46.0	۲	r			_	1	7	6	9	9	3	Γ				60		.62	( <b>4</b> .
	0.	H	L	L									L	L		Ц	33		33	+
	-		i				14	10	14	16	۲	8					20		) <u>+</u>	11)
	42.0 43.0	H	_	$\vdash$		H	Н			_			Н	Н	H	Н			Z	.RC
	0.			1	-	1	11	81	38	53	15	12	8	2			130	SZ	Œ	ပ
						2	22	28	20	36	21	14	ô				981	REGRESSION EQUATIONS	0.516) #SHOULDER LTH(IN)+(33.62)	0.045)*BUST/CHEST CIRC(IN)+(4,72
	1.0	H			_	H		,									=	L H	DEF	CHE
2	0				~	S	58	54	72	85	41	30	01	Ω			338	EG	크	71
BUST/CHEST CIRC(IN)	35.0 36.0 37.0 38.0 38.0 40.0 41.0	H		2		3	2		2	9	+	1	+	3	2	П		8	SHO	BUS
בֿ בֿ	0.6	Ц				Ц	43	84	122	146	24	31	24			Ш	218	189	) ×	<b>X</b>
HE8	31			2	2	4	11	106	163	186	14	90	23	7			712	RES	516	045
IST/(	38.	Н		Н	2	8							_	6				REG	0	0
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TABLE 12.

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SHOULDER LTH 1977 ARMY WOMEN

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TABLE 13

# A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SLEEVE INSEAM 1966 ARMY MEN

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STD ERROR = (0,409)\*SLEEVE INSERM(IN)+(29,09) = (0,066)\*BUST/CHEST CIRC(IN)+(16,69) REGRESSION EQUATIONS 0.164 0.164 2,63 ST DEY 36.92 19.13 MEAN BUST/CHEST CIRC 1966 ARMY MEN SLEEVE INSEAM

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TABLE 14

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SLEEVE INSEAM 1977 ARMY WOMEN

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A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WEIGHT 1966 ARMY MEN

6677 BUST/CHEST CIRCLIN)
[28,0 | 29,0 | 30,0 | 31,0 | 32,0 | 34,0 | 36,0 | 36,0 | 37,0 | 38,0 | 40,0 | 41,0 | 42,0 | 43,0 | 45,0 | 45,0 | 45,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48,0 | 48 518 552 584 531 13 11 22 33 20 130 186 866 712 518 606 1061 1110 794 478 217 63 15 TOTAL HEIGHT(LB)

STO ERROR

1,39

REGRESSION EQUATIONS = (0.096)\*WEIGHT(LB)+(21.64) = (7.531)\*BUST/CHEST CIRC(IN)+(-118.92)

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2,63 23,35

MERN 36.92 159.10

1966 ARMY MEN BUST/CHEST CIRC

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TABLE 16

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WEIGHT 1977 ARMY WOMEN

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ST/CH	37.0										1	2	8	12	13	33	23	23	23	10	6								164
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STO ERROR	1.47	1) 11.04
REGRESSION EQUATIONS	: (0.107)*WEIGHT(LB)+(20.58)	= (6.081)*BUST/CHEST CIRC(IN)+(-79.01)
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≃	0,808	908'0 9
ST DEV	2,49	18,76
MEAN	34.72	132,11
MEN	BUST/CHEST CIRC	

TABLE 17

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WRIST CIRC 1966 ARMY MEN

	TOTAL		1	1	E	20	66	265	388	1657	1721	1438	406	97	9	3	6662			
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	2.00 4			L	L	1	٤	17	46	38	16	١					130		44)	(0.065)#BUST/CHEST CIRC(IN)+(4.32)
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(N)	40.00	L		_	_	2	81	34	88	108	89	56	2	2			338	SNO	C( 1N)	T CIR
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	31.00   32.00   33.00   34.00	-						_	20	9	133	171	69	22	-	_	478	EV	2,63 (	
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	.00   32								3	و	8	22	12	8	L		63	MEAN	36.95	6.72
	3.00			L			L	L	L		3	3	-	9	-	-	16			
	9.00 30	Ļ		L			L	L	L		L	L		_				MEN	37 CII	ລ
	28.00 29.00 30.00		 	_	Ļ		Ļ		L	Ļ	Ļ	- 		L			-	1966 ARMY HEN	BUST/CHEST CIRC	WRIST CIRC
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TABLE 18

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WRIST CIRC 1977 ARMY WOMEN

	27,00   28,00   39,00   31,00   32,00   33,00   33,00   34,00   36,00   36,00   38,00   38,00   40,00   41,00   42,00   43,00   44,00   46,00   46,00   46,00   701Rt	ľ	P	90	205	422	462	167	25		1330			
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	70 4	ŀ	-	2	2						۵			_
	42.			3	3	3	2		_	ľ				.02
	1.00	$\parallel$	_			L	L		Н	Ļ	11 11		2)	+(+
	¥ 00			*	5	2					=	,	8.9	(NI
	100			1	0	13	4	1		l	35		)+(	RC
	9.00	$\parallel$			_		-	L		L	3	SN	NI I	13
(¥	S 3			2	13	26	12	*		١.	99	1T I 0	IRC	IES1
BUST/CHEST CIRCLIN)	38.0	Ħ,	9	9	22	36	23	2	1	ľ	83	REGRESSION EQUATIONS	(4,452)*WRIST CIRC(IN)+(8,95)	0.051)*BUST/CHEST CIRC(IN)+(4.02
HEST	7.00	4	_	L	Ĺ		Ĺ	H	_	L	-	N	AR I	SNE
UST/C	6 OO	ľ	2	16	30	28	47	ေ			164	SSI	2)*I	1)*
•	36.	Ţ,	-	14	**	92	61	13	2		183 217 164	GRE	. 45	. 05
•	36.00	$\parallel$		L	L	-	L	H	H	H	21	R	<del>*</del>	<u>.</u>
	00			*	26	88	72	22	1		183		"	."
	34.		1	2	23	98	78	21	2		192	œ	0.479	0.479
	33.00	$\parallel$	_	_	H	┝	$\vdash$	┝	H	$\vdash$	=	٠.		
	00.			2	91	38	8	34	*	L	179	ST DEY	2,49	0.27
	32				2	13	45	33	ဖ		106	ST	8	0
	31.00	H		L	-	L	ŀ	_	-	ŀ			2	62
	00.			L		6	27	18		L	28	MEAN	34,72	5.79
	0 30					-	4	E	-		a.		.,	
	29.0		_	-	$\vdash$	-	-	2	-	ŀ	$\dashv$	MEN	IRC	
	00'1	Ц		L	L		L	<u> </u>		L		2	<u>د</u>	بي
	10 2E							-			-	977 ARMY WOMEN	SUST/CHEST CIRC	WRIST CIRC
	27.0	191	١								TOTAL	77 F	37.70	IST
٠.		9	9		27				ט ענג		5	19.	BUS	품
		•			- •	- •	•							

TABLE 19

### A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND ANKLE CIRC 1966 ARMY MEN

10401	4	2						56	200	22	123	260	463	888	984	1192	113/	1201	989	487	210	1	35	2	m		6682	
г	20-00						-		†	1				2	-		7	-				†					9	
-	00 80 00			1								1	2	۵	ď	,		2		2							1.7	
_ h	.00 38.00								-	2	2	~،	91	2	1	,;	14	8	2		٥	3					76	
ľ	2						-	1	2	2	17	14	24	67	98	2	40	33	20	œ	,	,	-				256	
ŀ	00 36.00	ŀ					ç	2	4	12	15	30	62	200	10.	903	96	82	54	25		61	-				609	
t	00 35.00						,	1	9	12	26	47	a R	25.	25.	14.	196	180	85	19		77	*				1020	
OHT (IN)	00 34.00								20	18	40	17	aa	3	22	208	266	248	1	20	,	17	11	2	-	1	1961	
CROTCH HEIGHT(IN)	00   33.00							Đ	9	15	27	8	3	8	199	204	235	227	173	100	1771	41	9	6.			1461	
CRO	00 32.00								*	4	2	35	3	20	111	146	167	193	100		10	33	6	,	<u> </u>	-	990	
	31.								2	67	2	;		22	8	9	66	E			*	33	8				545	
	00 30.00									-	<u> </u> -		١	اء	72	26	30	3		69	21	13	٥	,	ا		198	
	00 29.00	11	<b></b> 1						٥		,	<b>.</b>	- -	9	ဖ	11	۲	-		77	13	9		-		1	7.7	
	00   28.00	71											-		2	E	ŀ	,	·	٥	က	-					22	;
	00 23.00	٦ ١											2			-		-			<b></b>						u	,
	00 126 00	7														_											<u> </u>	-
	195 00		12.00	11.76	11.50	11 25	3	11.00	10.76	10.50	10.25	10.00	L	l	ᆚ	┙	8.00	2 8.75	L	20 B	3	9.6	7.75	7.50	30 6	03:	20.7	1017

STD ERROR 1.82 0.56 REGRESSION EQUATIONS = (0,527)\*\*ANKLE CIRC(IN)+(28,34) = (0,050)\*CROTCH HEIGHT(IN)+(7,28) 0.162 0.162 1.84 ST DEY 33.05 8.93 MEAN 1966 ARMY MEN CROTCH HEIGHT ANKLE CIRC

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND ANKLE CIRC 1977 ARMY WOMEN

10404	DIN.	-	1	*	19	37		103	168	232	24.0		23	134	72	;		9	•	,	1330	
	37.00	ļ				_	1	4	_		L	1	4		L	1	+		-	-		-
-	-							-													-	-
_	36.00						1	1	-		۶	1				T					,	,
	36.00	$\frac{1}{1}$	+		-					8		+	2	2	-	+	1		$\dagger$	$\dagger$	_	
	34.00	1									-	1	_		L	1	_	_	1	1	_	
						ŀ	4	60	9	-		•	Φ		-	1					6	3
	33.00	1		-	٥		2	21	26	9.6		17	9	6.		٥	1		1		-	921
HICINI	00   32,00				•	†	~	17	23	5		4.7	33	2	i	ô	9					180
CROTCH HEIGHTCIN	29.00 30.00 31.00			0	, 4	7	10	20	3	62	30	48	85	36	3	18	*					279
283	30.	П		-		2	5	23	1.3		2	46	Y.	9	200	10	10		-			308
	00   29.			-	1,	7	9	85	2		S	<b>+</b> 1	22	3 8	, 3	ច្ច	æ	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	6			218
	27.00 28.00				1.	-	,	-			2	21	9.	2		13	u		2			104
	Г	7			1		-	7	,	,	9	0			٩	m	•	-		2		34
	0   26.00	7		1	1				,	,	1	1	<b> </b> -		1		-					7
	24.00 25.00			†			-	T	†	*								1				p-4
	0.40		10.00	9.76	9.50	200	07:	9.00 T	8.75 ⊢	8.50 T	200	0.60	8.00 T	7.75	2 50		7.25	7,00	,		3	TOTAL
	į.	Ľ		_	<u>L</u> .	L	┙	( N	1	L	A )	C	:	<u>ا</u>	NK NK	IA T		_				-

REGRESSION EQUATIONS = (0,812)\*\*ANKLE CIRC(IN)+(23.44) = (0,066)\*CROTCH HEIGHT(IN)+(6,18) R 0.231 0.231 1.72 ST DEV 30.07 MEAN 1977 ARMY WOMEN CROTCH HEIGHT ANKLE CIRC

SID ERROR 1.68 0.48

TABLE 21

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND HIP CIRC 1966 ARMY MEN

	TOTAL		<u> </u>			2	-	S	,	1.4	0	2	122	188	338	671	786	1036	1113	1113	720	380	137	34	+	6682
	0.04 0.														~			1	2	1						9
	.0 39												1		2	-	2	7	က	*						13
	0 38									-	2	2	3	*	8	8	11	16	17	15	9					84
	.0 37.							-	-		*	3	9	12	25	30	36	36	0+	38	20	7				256
	38					-			-	-	2	12	8	20	34	58	80	66	110	100	45	27	8			608
_	0 36.0							-	4		2	12	16	38	23	18	131	154	184	170	68	44	13	1		1020
CROTCH HEIGHT(IN)	0.34.0							2		3	8	14	22	31	90	113	160	209	244	260	169	90	20	3	3	1381
CH HEI	0 33.0									8	8	17	30	37	0٤	911	172	226	242	233	168	68	30	7	-	1451
CROT	0 32.0									2	+	8	18	21	41	83	114	165	160	185	110	67	22	9		980
	31.				-	1		1		1	3	3	13	14	28	43	45	88	96	26	99	40	31	8		545
	0 30.0								-			1	2	6	8	13	22	38	19	29	23	12	9	8		198
	0 29.(		1				1						7	1	7	10	9	5	12	2	10	10	9		1	77
	28.										1		1				3	9	2	*	3	-	-		1	22
,	1 27.0																က			-	-				1	ß
	3 26.0								1												1				1	-
į	25,0	F3.0	200	2 1 2			200			45.0	_	_	_	181	_	30.00		32.0	96	35.0	34.0	33.0	32.0	31.0	30.0	TOTAL

STO ERROR 1.83 REGRESSION EQUATIONS = (0.072)\*HIP CIRC(IN)+(30.38) = (0.129)\*CROTCH HEIGHT(IN)+(32.83) 0.097 œ 1.84 ST DEY 33.05 37.09 MEAN 1966 ARMY MEN CROTCH HEIGHT HIP CIRC

TABLE 22

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND HIP CIRC 1977 ARMY WOMEN

		_				_		_			_		_	_	_					_		_	<u> </u>	_	
	TOTAL	1					,	2	3	10	14	28	46	101	167	193	241	196	120	84	99	25	8	2	1330
	0																								
	37.0														1										
	9																								
	36.0	П											1				1								3
	9																								
	35.0				,							1	,,,,	3	3	2	3	3	1	1					18
	9	Ш																							1
	34.0											2	3	4	9	8	6	4	2	1					39
	33.0						_	L										L		Ц					3
	33	-								2	7	2	8	14	28	21	15	13	14	3	3				128
2	0	Ц	Ц					Ш			Ш	Ц		1	2	2	1		1			Ц			-
CROTCH HEIGHT(IN)	32.0									2	4	9	6	20	18	32	36	21	24	6	2	1			190
<u>9</u>	31.0	Ц	Ц			-	Ц							2	1	(7)	3	2	8						-
¥ -								2	2	1	4	2	10	26	33	42	48	38	39	13	2	4	2	-	279
37.0	30.0	$\sqcup$	Ц	Ц								Ц		3				Ľ	_						
8	$\overline{}$										+	+	4	18	34	1+	69	69	35	23	16	6			308
	29.0	$\vdash$	Н	$\sqcup$	_			_							,,	Ì						Н			
	$\Box$	П									1	3	6	12	23	30	34	34	27	21	11	o	ო	-	218
	28.0	Н	Н		_	Ц	L		Н	_	Н	Щ	Н	Н			Щ				Н	Н		Н	
												-	2	1	4	14	22	13	25	89	12	8			104
	27.0	$\vdash$	Н	Н	-	_	_	H			Н	_		Н	_	Н		Н		Н		Н		Н	
	_											1		2	2	8	3	7	9	4	8	9			34
	28.0	Н		$\dashv$	٦	Н	Н					Н		H	Н	Н	Н	Н				Н	Н	Н	
	_													7	-		1	2	1	1					2
	25.0	H	$\dashv$	$\dashv$	$\dashv$	Н	Н									Н			Н	Н	Н	Н		Н	
					1																				
	24.0	밁							, ,	, , ,		, ,	,	, ,	<u>ب</u>	, , ,	7			7		, ,			يخ اد
	٦	200	210	200	0	100	2 6	44.0	45.0		2 0	200	1		000	38.0	3 6	900	2 20	24.0	330	0 00	3 -	30.0	TOTAL
	. L					<u> </u>				1		10	_		41			<u>-</u>							<b>-</b>

REGRESSION EQUATIONS	= (0,181)*HIP CIRC(IN)+(23,26)	= (0.374)*CROTCH HEIGHT(IN)+(26.35)
∝	1.72 0.260	0,260
ST DEV	1.72	2,48
MEHN	30,07	37,59
1977 ARMY WOMEN	CROTCH HEIGHT	HIP CIRC

STD ERROR 1.66 2.39

TABLE 23

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND STATURE 1966 ARMY MEN

| TOTAL |   | 1  | σ   | 11  | 38  | 87  | 199   
   
   | 372   
  | 544  
   
   | 773   | 937   
   | 1043  | 970   | 194   | 476   | 235   
   | 135   | 58  | 35  | on  | 1   
  | 6682  |
|-------|---|--|---|---|---|---
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---|--
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--|---
---|---|---|---
---|---|---|---|---
---|--|---|
| 0.04  |   |  | _   |   | 1   | 2   |   
   
   | 1   
  |  
   
   |   |   
   |   |   |   |   |   
   |   |   |   |   |   
  | 9   |
|       |   |  | 1   | 3   | *   | 3   | 2   
   
   | 2   
  | 1  
   
   | 1   |   
   |   |   |   |   |   
   |   |   |   |   |   
  | 17  |
| 6     |   |  | 4   | 4   | 15  | 22  | 31  
   
   | 13  
  | 4  
   
   | 1   |   
   |   |   |   |   |   
   |   |   |   |   |   
  | 94  |
| 37    |   | 1  | 1   | 2   | 13  | 38  | 28  
   
   | 88  
  | 47   
   
   | 28  | 6   
   | 2   | 1   |   |   |   
   |   |   |   |   |   
  | 256   |
| ┍┈    |   |  | 2   | 1   | 4   | 12  | 89  
   
   | 158   
  | 144  
   
   | 146   | 117   
   | 23  | 10  | 1   |   |   
   |   |   |   |   |   
  | 609   |
|       |   |  |   |   | 2   | 9   | 29  
   
   | 95  
  | 214  
   
   | 278   | 208   
   | 131   | 45  | 11  | 4   |   
   |   |   |   |   |   
  | 1020  |
| -     |   |  |   |   |   | 2   | 10  
   
   | 37  
  | 102  
   
   | 215   | 371   
   | 350   | 212   | 74  | 10  | 7   
   | 1   |   |   |   |   
  | 1881  |
|       |   |  |   |   |   | 2   | 3   
   
   | 10  
  | 31   
   
   | 79  | 237   
   | 360   | 377   | 231   | 93  | 18  
   | 7   | 2   |   |   |   
  | 1461  |
| М     |   |  |   |   |   |   |   
   
   | 1   
  | 1  
   
   | 18  | 89  
   | 136   | 241   | 286   | 158   | 20  
   | 18  | 2   | 2   |   |   
  | 980   |
| 31    |   |  |   |   |   |   |   
   
   |   
  |  
   
   | 9   | 12  
   | 34  | 72  | 109   | 158   | 98  
   | 20  | 16  | +   |   |   
  | 546   |
| 0     |   |  |   |   |   |   |   
   
   |   
  |  
   
   | 2   | 1   
   | 9   | 10  | 33  | 43  | 37  
   | 36  | 20  | 8   | 2   |   
  | 188   |
| 0 29  |   |  |   |   |   |   |   
   
   |   
  |  
   
   |   |   
   | 3   | 2   | 7   | 8   | 13  
   | 16  | 13  | 8   | 9   |   
  | 77  |
| 28    |   |  |   |   |   |   |   
   
   |   
  |  
   
   |   |   
   |   |   |   |   | 3   
   | 9   | *   | L   | - 2   |   
  | 22  |
| М     |   |  |   |   |   |   |   
   
   |   
  |  
   
   |   |   
   |   |   |   | 1   | 1   
   | 1   | 1   | 1   |   |   
  | 2   |
| _     |   |  |   |   |   |   |   
   
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   |   |   
   |   |   |   |   |   
   |   |   |   |   |   
  | 1   |
| 25    | 79.0  | 200  | 2 5   | 28.5  | 2 2   | 2 2   | 2 0   
   
   | 2000  
  | _  
   
   | _   | ᅩ   
   |   | _   | _   | o ug  | 2   
   | 2 6   | 6   | 9 5   |   | 200   
  | TOTAL   |
|       | 0   29.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0   38.0   39.0   40.0 | 5,0 26,0 27,0 28,0 29,0 30,0 31,0 32,0 33,0 34,0 35,0 36,0 37,0 38,0 39,0 40,0 | 5,0 [26.0 [27.0 [28.0 [30.0 [31.0 [32.0 [33.0 [34.0 [36.0 [37.0 [38.0 [39.0 [40.0 [ | 5,0 (26.0 (27.0 (28.0 (39.0 (31.0 (32.0 (33.0 (34.0 (36.0 (37.0 (38.0 (39.0 (40.0 ( | 5,0 (26.0 (27.0 (28.0 (39.0 (31.0 (32.0 (33.0 (34.0 (36.0 (37.0 (38.0 (39.0 (40.0 ( | 5,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0         5,0   26.0   27.0   28.0   39.0   40.0         1       2     1     4     1     1       3     1     2     4     3     1       4     3     1     3     1 | 5,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0         6,0   26.0   27.0   28.0   39.0   40.0         7     1       8     1       9     1       1     2       1     2       2     4       3     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     2       4     1       1     3       1     3 <tr< td=""><td>5,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0         6,0   26.0   27.0   28.0   31.0   32.0   34.0         7,0   26.0   29.0   30.0   31.0   38.0   31.0         8,0   26.0   27.0   38.0   40.0         9,0   26.0   27.0   38.0   40.0         10,0   20.0   31.0         11,0   20.0   31.0         12,0   34.0   34.0         13,0   20.0   31.0         14,0   20.0   31.0         15,0   20.0   31.0         16,0   27.0   34.0         17,0   20.0         18,0   20.0   31.0         19,0   20.0         10,0   20.0  </td><td>5,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0           6,0   26.0   27.0   28.0   30.0   31.0   38.0   38.0   40.0           7,0   26.0   29.0   20.0   31.0   31.0         1       <t< td=""><td>  25,0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   34.0   36.0   36.0   37.0   38.0   39.0   40.0  </td><td>  25,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0  </td><td>  25,0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0   38.0   39.0   40.0  </td><td>  25,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0  
40.0   40.0  </td><td>  25,0   26,0   27,0   28,0   30,0   31,0   32,0   33,0   36,0   36,0   37,0   38,0   40,0  </td><td>5,0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   32.0   40.0   37.0   3</td><td>26,0         26,0         27.0         28.0         30.0         31.0         32.0         33.0         34.0         36.0         37.0         38.0         40.0         40.0           79,0         78,0         77.0         1         4         1         2         4         3         1         1         1         1         1         2         4         13         1         1         1         2         4         13         1         1         1         1         1         1         3         1         2         4         13         1</td><td>  26,0   26,0   27,0   28,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   38,0   40,0   40,0   10,0  </td><td>  25,0   26,0   27,0   29,0   30,0   31,0   32,0   34,0   36,0   37,0   38,0   40,0   40,0     79,0   78,0  
78,0   78,0</td><td>  25,0   26,0   27,0   29,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   39,0   40,0  </td><td>  26,0   26,0   27,0   28,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   38,0   40,0   40,0   10,0  </td><td>  126,0   126,0   126,0   126,0   126,0   136,</td><td>  26,0   26,0   27,0   28,0   29,0   30,0   31,0   32,0   34,0   36,0   37,0   38,0   40,0  </td></t<></td></tr<> | 5,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0         6,0   26.0   27.0   28.0   31.0   32.0   34.0         7,0   26.0   29.0   30.0   31.0   38.0   31.0         8,0   26.0   27.0   38.0   40.0         9,0   26.0   27.0   38.0   40.0         10,0   20.0   31.0         11,0   20.0   31.0         12,0   34.0   34.0         13,0   20.0   31.0         14,0   20.0   31.0         15,0   20.0   31.0         16,0   27.0   34.0         17,0   20.0         18,0   20.0   31.0         19,0   20.0         10,0   20.0         10,0   20.0         10,0   20.0         10,0   20.0         10,0   20.0         10,0   20.0         10,0  
20.0         10,0   20.0 | 5,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0           6,0   26.0   27.0   28.0   30.0   31.0   38.0   38.0   40.0           7,0   26.0   29.0   20.0   31.0   31.0         1 <t< td=""><td>  25,0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   34.0   36.0   36.0   37.0   38.0   39.0   40.0  </td><td>  25,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0  </td><td>  25,0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0   38.0   39.0   40.0  </td><td>  25,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0  </td><td>  25,0   26,0   27,0   28,0   30,0   31,0   32,0   33,0   36,0   36,0   37,0   38,0   40,0  
40,0   40,0  </td><td>5,0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   32.0   40.0   37.0   3</td><td>26,0         26,0         27.0         28.0         30.0         31.0         32.0         33.0         34.0         36.0         37.0         38.0         40.0         40.0           79,0         78,0         77.0         1         4         1         2         4         3         1         1         1         1         1         2         4         13         1         1         1         2         4         13         1         1         1         1         1         1         3         1         2         4         13         1</td><td>  26,0   26,0   27,0   28,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   38,0   40,0   40,0   10,0  </td><td>  25,0   26,0   27,0   29,0   30,0   31,0   32,0   34,0   36,0   37,0   38,0   40,0   40,0     79,0   78,0</td><td>  25,0   26,0   27,0   29,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   39,0   40,0 
 40,0  </td><td>  26,0   26,0   27,0   28,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   38,0   40,0   40,0   10,0  </td><td>  126,0   126,0   126,0   126,0   126,0   136,</td><td>  26,0   26,0   27,0   28,0   29,0   30,0   31,0   32,0   34,0   36,0   37,0   38,0   40,0  </td></t<> | 25,0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   34.0   36.0   36.0   37.0   38.0   39.0   40.0 | 25,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0  
40.0   40.0 | 25,0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0   38.0   39.0   40.0 | 25,0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   37.0   38.0   39.0   40.0 | 25,0   26,0   27,0   28,0   30,0   31,0   32,0   33,0   36,0   36,0   37,0   38,0   40,0 | 5,0   26.0   27.0   28.0   29.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   40.0   37.0   38.0   32.0   40.0   37.0   3 | 26,0         26,0         27.0         28.0         30.0         31.0         32.0         33.0         34.0         36.0         37.0         38.0         40.0         40.0           79,0         78,0         77.0         1         4         1         2         4         3         1         1         1      
  1         1         2         4         13         1         1         1         2         4         13         1         1         1         1         1         1         3         1         2         4         13         1 | 26,0   26,0   27,0   28,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   38,0   40,0   40,0   10,0 | 25,0   26,0   27,0   29,0   30,0   31,0   32,0   34,0   36,0   37,0   38,0   40,0   40,0     79,0   78,0 | 25,0   26,0   27,0   29,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   39,0   40,0 | 26,0   26,0   27,0   28,0   30,0   31,0   32,0   34,0   36,0   36,0   37,0   38,0   40,0   40,0   10,0 | 126,0   126,0   126,0   126,0   126,0   136,0 
 136,0   136, | 26,0   26,0   27,0   28,0   29,0   30,0   31,0   32,0   34,0   36,0   37,0   38,0   40,0 |

STO ERROR	1.06	1.49
REGRESSION EQUATIONS	= (0,579)*STATURE(IN)+(-6,73)	= (1,158)*CROTCH HEIGHT(IN)+(30,44)
œ	0.819	0.819
ST DEV	1.84	2,60
MEAN	33,05	68,71
1966 ARMY MEN	CROTCH HEIGHT	STATURE

TABLE 24

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND STATURE 1977 ARMY WOMEN

		1	9													<u>e</u>		]	
TOTAL		7	•	11	27	20	90	116	193	191	194	189	122	80	36	=			1330
37.0	1	4	_																
				1															1
36.0			2		1		4												3
35.0		-	2	3	9	2	1	_		1									18
34.0		1	2	9	6	8	1.0	*		-		-	_						39
33.0		4			H	H		H	L	H	H	H	H	L	Н	_	_	$\dashv$	
0				2	6	24	36	33	17	2	2		L						128
0 32					E	6	33	#	63	88	14	2							190
30.0 31.0 32.0 33.0						3	o	29	81	7.4	46	32	9						279
30.	$\ $			-			_	2	32	98	98	73	38	2		1			308
29.0	H	-		-	$\vdash$	-	-	H	_	16	43	-	-	6	9	2		H	
28.0	$\parallel$				_		L	L	L		-	99	4	53					218
										~	6	13	58	36	12	3	I		104
0 27.0	П											-	4	8	6	01	2		34
26.0	$\ $		<u> </u>	T		<u> </u>	r	r	r		-	T			-	2	+	Н	
24.0 25.0	$\parallel$	-		-	$\vdash$	$\vdash$	-	-	-	-	-	L	L	L		L	-		
0.4	Ц		_	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	_	Ĺ		<del>-</del>
2	73.0	79 0	ָ ק	200		2 0	00.00			200		200	מין כ			n o	3 6	28.0	TOTAL

STD ERROR	0.88	1.30
REGRESSION EQUATIONS	= (0.579)*STATURE(IN)+(-7.08)	= (1,282)*CROTCH HEIGHT(IN)+(25,61)
œ	0.861	0.861
ST DEV	1.72	2.57
MEAN	30.07	64.15
1977 ARMY WOMEN	CROTCH HEIGHT	STATURE

TABLE 25

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND UPPER THIGH CIRC 1966 ARMY MEN

	П																	
TOTA		1	4	10	26	100	233	495	818	1262	1378	1254	748	283	83	12		6682
40.0				L	L													
-	$\ $								~	_								9
39.0	H	-			_		_	H	$\vdash$		-	L	$\vdash$	_		Н	$\dashv$	
$\vdash$						1		1		S	9	7	2					17
38.0				2	1	4	+	٦,	15	16	91	18	67	2				94
37.0	H	-			_		_	_		_		H	_	_			$\dashv$	
-			-	1	3	3	16	24	22	52	28	45	22	2	1			256
0 36.0			1		3	14	24	1.7	80	101	130	113	72	27	3			609
35.0	H	_	1	2	2	0	8		2	2		2	2	3	6			
34.0	$\prod$	_		_	-	10	38	14	122	192	219	202	102	43				1020
3,0		-	-	1	S	13	37	101	191	245	284	290	991	19	18	2		1381
32.0 33.0 34.0					4	56	55	109	178	301	280	197	691	19	10	٤		1451
_				1	2	13	29	92	115	185	222	194	601	35	١	5		990
31.0	H	_		_	2	7	)	)	Н			_	_	9	9	_	1	
30.0							17	40	73	66	104	83	73	29	)			545
$\vdash$						. 7	6	11	34	46	32	24	24	10	4			198
0 29.0				1	1	1	2	10	01	10	18	8	۷	6				77
28.0	$\ $			1		Н	-		3	4	8	3	2	Н	Н	Н		22
27.0	$\parallel$	_				Ц	Щ		L									~
								1	-	2								s
26.(							1											
25,0	Ц		ر			Ļ	Ţ	Ļ	Ļ	Ų		Ļ				Ţ		اب ا
	31.0	30		200		1 0	_		_	10	_	-		3 2	_	9	15.0	TOTAL

STD ERROR 1.84 REGRESSION EQUATIONS (0.012)\*UPPER THIGH CIRC(IN)+(32.79) (0.013)\*CROTCH HEIGHT(IN)+(21.39) 11 П 0.013 1.84 ST DEY 33.05 21.82 MEAN UPPER THIGH CIRC 1966 ARMY MEN CROTCH HEIGHT

TABLE 26

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND UPPER THIGH CIRC 1977 ARMY WOMEN

	TOTAL		7	10	26	64	136	253	313	253	163	98	27	7	,	1330
	37.0		$\vdash$		-	-	-	L			L	-	L	_	L	
	0					-								ĺ		-
	0 36						_									9
	0   35.				-		8	8	8	3	2					18
	24.0 25.0 26.0 27.0 28.0 29.0 30.0 31.0 32.0 33.0 34.0 35.0 36.0 37.0					4	9	2	2		3	2				39
ŝ	.0 33		-	4	3	6	18	56	59	23	6	*	2			128
CROTCH HETOHT(IN)	.0 32			8	9	6	56	LE	38	37	88	8	- 2			190
TCH HE	.0 31		1	7	6	01	88	99	٤3	9†	38	14	5	2	. 1	279
CRO	0 30			2	5	9	27	51	92	69	59	22	9	1		308
	0 29		1		3	6	20	38	63	37	35	14	10	3		218
,	0 28					2	4	18	24	22	13	15		-		104
	.0 27.						4	2	9	4	9	8	2			34
	.0 26								3			-				2
	0 25								-							-
	24,	29.0	28.0	22.0	1 26 U	26.0	24.0	23.0	22.0	010	<u> </u>	1	18.0		16.0	TOTAL

1977 ARMY WOMEN	MEAN	ST DEV	œ	REGRESSION EQUATIONS	STO ERROR
CROTCH HEIGHT	30.07		0.184	72 0.184 = (0.177)*UPPER THIGH CIRC(IN)+(26.10)	1.69
UPPER THIGH CIRC	22,40	1.79	0.184	.79 0.184 = (0.191)*CROTCH HEIGHT(IN)+(16,66)	1.76

TABLE 27

# A BIVARIATE FREQUENCY TABLE FOR FOOT BREADTH AND FOOT CIRC 1966 ARMY MEN

	D TOTAL	1		9	8	38	68	204	525	731	1190	1149	888	908	447	225	177	48	24	17			8682
	6   6.00	-																					1
	92.4				2	2	8	1	2	1													25
IN)	9 4.60			9	9	23	48	71	83	40	28	9	9	8	2								318
FOOT BREADTH(IN)	92 4 56				1	13	32	108	290	361	374	175	68	20	24	8	8						1613
FOOT B	75 4.00					1	.3	13	137	307	189	999	483	258	66	20	99	12					2783
	50 3.75							1	10	22	601.	300	421	469	272	120	16	20	16	12			1843
	.25 3.50											2	9	22	48	**	16	91	٤	7	1	1	182
													-		2	2	2			-			a
	3.00	12.60	10.60	14:00	בי בי בי	11.00	200	36.05					l	100	T	3 2				30.00		2000	TOTAL

REGRESSION EQUATIONS	(0.262)*F00T CIRC(IN)+(1.29)	= (1.924)*F00T BREADTH(IN)+(2.40)
	11	H
œ	0.710	
ST DEY	0.22	0.58
	3.87	9.82
	BREADTH	FOOT CIRC
1966	FOOT	FOOT

STD ERROR 0.15 0.41

TABLE 28

A BLYARIATE FREQUENCY TABLE FOR FOOT BREADTH AND FOOT CIRC 1977 ARMY WOMEN

	TOTAL	1	9	13	27	70	201	213	283	273	166	65	22			1330
1	4.50		,,,													-
	10 4.25	-	*	9	6		1									15
FOOT BREADTH(IN)	3.75 4.00			-	=	32	34	10	4							86
OT BREA	П				133	38	156	181	132	63	-	-				199
5	9.50						6	25	143	198	199	2	(4)			526
	0 3.26						-		1	24	77	67	13	_		129
	5 3.00											1				10
	2.75	10.75	10.50	10.26	10.00	9.76	8.50	8.25	8.8	8.75	8.60	8.26	8.00	7.75	7.50	TOTAL

(1.880)\*F00T BREADTH(IN)+(2.34) = (0.382)\*F00T CIRC(IN)+(0.09) REGRESSION EQUATIONS 0.847 ST DEV 0.20 0.45 3.49 8.90 MEAN 1977 ARMY WOMEN FOOT BREADTH FOOT CIRC

STD ERROR 0.11 0.24

TABLE 29

A BIVARIATE FREQUENCY TABLE FOR FOOT BREADTH AND HEEL BREADTH 1966 ARMY MEN

	TOTAL		3	2	16	29	116	198	643	618	1604	1240	1405	665	121	63	9	2	6682	,,,,,,
	6   5.00						1												1	1
	50 4.75				1	1	*	9	2	3	*	1	1						22	֭֭֭֭֭֭֚֓֡֜֜֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֡֡֡֡֡֡֡֡֡֡֡
( IN)	4.25 4.50		2	1	8	8	27	38	99	99	63	27	18	9					319	
FOOT BREADTH( IN)	4.00 4.		1	1	9	18	24	85	264	227	386	192	170	41	4	-			1513	<u>,                                    </u>
FOOT	3.75 4.				1	7	28	99	248	282	218	584	683	214	34	8	1		2793	2
	3.50 3				1		2	9	9	87	323	338	563	363	67	27	9	2	1843	7
	3.25 3							2	2	*	8	27	29	20	14	18	-		182	$\dashv$
	3.00											Ţ	[m	~	7				, a	
		3.60	2			5	2000		3 6		SIC SICE				۱		2.60	2 6	1018	

STO ERROR	0.19	0.16
REGRESSION EQUATIONS	= (0.582)*HEEL BREADTH(IN)+(2.30)	= (0.429)*FOOT BREADTH(IN)+(1.04)
	ത	മ
œ	0.49	0.49
ST DEV R	0.22 0.499	0.18 0.499
T DEV		2,70 0,18 0,49
ST DEV	0.22	0.18

TABLE 30

A BIVARIATE FREQUENCY TABLE FOR FOOT BREADTH AND HEEL BREADTH 1977 ARMY WOMEN

FOOT BREACTH(IN)  2.76   3.00   3.26   3.50   4.00   4.26   4.60   101AL  2.80  2.80  2.80  2.80  2.80  2.80  2.80  2.80  2.80  2.10  2.10  2.10  2.10  2.10  2.10  2.10  2.10  3.10  3.10  4.4  3.1  1.3  4.3  1.1  2.80  1.3  3.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.1  1.3  4.4  3.2  1.3  3.4  4.4  4.4  4.4  4.4  4.0  4.4  4.4								;								
FOOT BREADTH(IN)  3.00 2.80 2.80 2.60 2.60 2.40 1 28 40 108 32 1 2.50 2.20 2.00 2.00 2.00 2.00 2.00 2.00		TOTAL			13	44	67	190	367	288	258	76	32	2		1330
FOOT BREADTH(IN)  3.00 2.80 2.80 2.60 2.60 2.40 1 28 40 108 32 1 2.50 2.20 2.00 2.00 2.00 2.00 2.00 2.00		Н														
FOOT BREADTH(IN)  3.00 2.80 2.80 2.60 2.60 2.40 1 28 40 108 32 1 2.50 2.20 2.00 2.00 2.00 2.00 2.00 2.00		. 20	${\mathbb H}$		۲	_	_		Н	_	Н	Н				ᅥ
FOOT BREADTH(IN)  3.00 2.90 2.90 2.60 2.60 2.40 1 3 4 3 2.60 2.60 2.60 2.00 2.10 2.00 2.00 2.10 2.00 2.00 2.0		7			-											~
FOOT BREADTH(IN)  3.00 2.90 2.90 2.60 2.60 2.40 1 3 4 3 2.60 2.60 2.60 2.00 2.10 2.00 2.00 2.10 2.00 2.00 2.0		.25	$\!$	4		_		_	Н		Н		Н			-
FOOT BREADTH(1)  3.00 2.90 2.90 2.60 2.60 2.60 2.60 2.60 2.60 2.60 2.70 2.60 2.70 2.70 2.70 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2.1			•	2		9	es	1	2						, !	2
FOOT BREADTH(1)  3.00 2.90 2.90 2.60 2.60 2.60 2.60 2.60 2.60 2.60 2.70 2.60 2.70 2.70 2.70 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2.1	-	8	$\!$	_		_						Ш		Ц		_
3.00 2.80 2.80 2.80 2.60 2.60 2.10 2.00	NI)	*	,	_	m	11	£1	32	24	11	2	1				8
3.00 2.80 2.80 2.80 2.60 2.60 2.10 2.00	THO	26	Ц	_			Ĺ			Ĺ						
3.00 2.80 2.80 2.80 2.60 2.60 2.10 2.00	REA	3.	I		4	9	9	81	3	+	0,	4	+	,	. ,	2
3.00 2.80 2.80 2.80 2.60 2.60 2.10 2.00	10	õ	Ц			2	3	01	[1]	11	L					2
3.00 2.80 2.80 2.80 2.60 2.60 2.50 2.50 2.10 3.10 3.00	Ď	3.			62	2	9	0	2	+	7	7	9			ا ي
3.00 2.80 2.80 2.80 2.60 2.60 2.50 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2.1		S)					1	7	<b>†1</b>	13	£1	E	1			2
3.00 2.80 2.80 2.80 2.70 2.60 2.50 2.10 2.00 2.00 2.00 2.00 2.00 2.00 2.0		3.2	П					6	9			3	)			a
3.00 2.90 2.90 2.90 2.00 2.50 2.50 2.10 2.00 2.00 2.00 2.00 2.00 2.00 2.0		0							1(	2	37	)1	1(			2
2.75 2.80 2.80 2.80 2.60 2.50 2.10 2.10 2.10 1.90 1.90		3.0	IT			Г	Γ									
100000000000000000000000000000000000000										-		9	2	2		7
100000000000000000000000000000000000000		2.7		Ľ	1	T	Ί.	T	T	T	T	T	T	T	Ţ	اي
• • • • • • • • • • • • • • • • • • • •		Ĥ	3.00	1	•	٦	ڊ از	بأزة				٠  د		ة أذ		5
		. 1	Ľ	Ľ	<u>'</u> '	N)	) }	110	143 143	1918 -1,			ــــــــــــــــــــــــــــــــــــــ	1	1	

STD		
QUATIONS	BREADTH(IN)+(1.98)	T BREADTH(IN)+(0.99)
REGRESSION EQUATIONS	= (0.630)*HEEL	0.402)*F00
œ	0.503	5 0.503 = 0
•		
ST DEV	0.20	0.16
MEAN ST DEV	3.49 0.20	2.40 0.16
: <b>-</b> 70		0.1

TABLE 31

#### A BIVARIATE FREQUENCY TABLE FOR FOOT LENGTH AND FOOT BREADTH 1966 ARMY MEN

TOTAL		•	22	319	1513	2793	1843	185	61	6682	
9,75 10,00 10,25 10,50 10,75 11,00 11,25 11,50 11,75 12,00 12,25 12,50 12,56				1							
2.50	+							L	L		
.25			2	3	-				_	9	
00 12			2	10	15	က				30	
5 12.			*	21	22	6	-			57	
111.7	1	_	-	18	57	17	9			124	
11.50	+		2	62	172	127	18			381	
11.25	+		9		H	-	47	3	_	<del>                                     </del>	
1.00		_	L	67	247	227	-		-	597	
1.75			_	24	295	435	123	_		915	
.50 10			9	3	373	629	322	81		1439	
25 10.			-	62	182	604	386	26	~	1239	
0 10.				8	101	432	424	42		1007	
5 10.0				2	17	148	281	28	2	502	
-	H				9	94	160	30		53	
9.50	$\ $	_	_		-	$\vdash$	55	-		103	
9.28	$\parallel$				_	23	S		-	-	
9.00			_	L	_	F	2	6		12	
8.75		_		L	L		-		L	_	
8.50 8								-		_	
<u> </u>								-		-	
8.25	5.00 H				200			20.00	3.50	3. UU TOTAL	

TABLE 32

A BIVARIATE FREQUENCY TABLE FOR FOOT LENGTH AND FOOT BREADTH 1977 ARMY WOMEN

-	101AL			22	86	661	228	020	821	10		1330		STD ERROR 0.42 0.17
ı	9,76 10.00 10.25 10.50 10.75 11.00 11.25 11.50 11.75				1	,								REGRESSION EQUATIONS 1.290)*FOOT BREADTH(IN)+(5.07) 0.219)*FOOT LENGTH(IN)+(1.39)
	11.00 11			2	_	-						-	e 71	ONS IDTH(IN)
	0.75			2	2	۵	1		_				-	BREA LENG
	1. 60	$\downarrow$		3	2	2		9			-	-	2	IN EQ 1001 1001
	26 10			3	2	5	?	2					200	SS10 90)*F
THUIN	00 10.			C.	28	6	ŝ	39				1	166	REGRESSION EQUATIONS (1.290)*FOOT BREADTH (0.219)*FOOT LENGTH(
FOOT LENGTH(IN)	76 10.			-	2		ì	61	م			1	193	11 11
FOG	9.60 9.				α		110	111	11			1	240	R 0,531 0,531
	9.26 9.				٩		114	134	33	9	2		293	DEV . 49
	L			-		•	46	101	31				183	ST DI
	8.75 9.00						17	42	33		*		98	MEAN 9.57 3.49
							۴-	22	2	ا.	2		43	
	8.50				1	-		u	, "	3	2		11	WOME H TH
	8 00 8.25			1				-					<b>-</b> -4	ARMY WOMEN LENGTH BREADTH
			2 7.60	4.26	H. 00	200	;	3.60	3,26	3 00	ľ	2, 79	TOTAL	1977 F00T F00T

TABLE 33

A BIVARIATE FREQUENCY TABLE FOR FOOT LENGTH AND FOOT CIRC 1966 ARMY MEN

	TOTAL				8	60	39	88	204	622	731	1190	1149	686	805	447	226	177	48	24	17	1	1	6682
	0 12.76	-		_		_			1							_		_						1
	25 12.50				1	-		2	1	1	-													9
	12.00 12.25				1	1	2	6	9	9		3	1	1										30
	11.75 12.					3	2	8	*	14	6	6	2	3	2	1								63
	11.50   11		1			1	2	2	13	28	22	24	١	١	5	*	3							124
	11.25 11				2		4	21	37	20	69	84	20	24	11	9	-	2						381
	11.00.11				_		13	14	48	8.	112	118	98	99	26	11	8	8	2					697
CHE)	-	H				1	6	G;	46	36	158	219	136	111	73	26	13	12	3					915
FOOT LENGTHCIN	10.25   10.60   10.75	H	. [			2	*	16	23	116	177	301	294	215	140	83	36	23	9	9				1439
F007	10.25						2	3	16	67	114	228	239	243	163	96	32	40	10	9	3			1239
	10.00					Ш	1	-	9	21	43	138	207	196	183	97	51	42	10	9	2			2 1007
	9.76					-			2	9	19	48	1 79	1 93	3 118	3 76	33	17	5	3	1 2		_	7 602
	9.60				_	L	_			1	1 (	6 12	13 34	17 31	15 6	19 43	16 2.	8 23	9	3	•			103 267
	9.26												1	3 1	3 1	5 1	5	2	-	1	1			21 10
	9.00												1											-
	8.75	H							_	_											1			1
	6 8.50	H																		-				
	8,25	10 50	10.05	13.50	32.11		36 11		10.75					L	36.0	┸	32.8	2 2	8 25		36.6	2 50	7 25	TOTAL

STO ERROR 0.45 REGRESSION EQUATIONS = (0,433)\*FOOT CIRC(IN)+(6,28) = (0,562)\*FOOT LENGTH(IN)+(3,93) 0.493 0.493 0.51 ST DEV 10.54 9.85 MEAN 1966 ARMY MEN FOOT LENGTH CIRC FOOT

TABLE 34

A BIYARIATE FREQUENCY TABLE FOR FOOT LENGTH AND FOOT CIRC 1977 ARMY WOMEN

TOTAL		_	5	13	27	70	201	213	283	273	156	3	8	22	-		1330	) ERR
								1		.,							-	STO ERR
11.75	H	_			-					-	$\vdash$	+	+	-	_		$\dashv$	
10							1										-	
11.50	H		-	$\vdash$		$\vdash$			_	H	H	†	1	٦		_		
25																		
11.26			_				1										က	
11.00	Ц		_	L	L	L	_	_	L	L	L	4	4	_	L	-	$\dashv$	SZ
		-1	-		-	ស	က	-									12	011
10.75	H		┞	$\vdash$	$\vdash$	┝	┞	$\vdash$	$\vdash$	H	+	+	-		┝	-	_	JUR
20				(4.	-	9	121	6	~	1							31	E(
10.50			T	-		0	27	0,	=	0		1	1				69	REGRESSION EQUATIONS
10.25		L	L	L	L	_	[~	lacksquare		1	-	4		L	L	L	_	ESS
	1		67	-		9 0	9	200	30	2	;	6					155	EGR
10.00	ŀ	H	╀	╀	+	╀	╀	$\vdash$	╀	+	+	1		L	-	$\mid$		2
9.75   10.00   10				-	۱۰	3	: 3	5	1	6	5	*					193	
2 6	+	T	T	T	,	12				3 5	,	26	9	_		T	240	<u>~</u>
9.50		L		$\perp$		-	3,5	3 2	2 2	1	1	2		L	L		5	
L	1					ى ار	٩		5	3	2	34	17	-			293	ح
9.25		-	╀	╀	+	+	+	+	+	+	+		-	H	+	+		ST DEV
-	1						0	, 2	: =		8	43	12	1			183	ST
o	;	t	t	†	T	†	†	<u></u>	,  -	֓֡֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֓֓֡֜֜֓֓֓֡֓֡֓֡֓֡֡֡֓֓֡֓֡֓֡֡֡֡֓֡֓֡֡֡֡֡֓֡֡֡֡֡֡		(7)	_		, ,	,	36	2
75			$\downarrow$	$\downarrow$	1	$\perp$		Ţ	ľ	1	킭	23	20	1	1	1		MEAN
-	4								بأد	٥	╛		œ	-	$\left\  \cdot \right\ $		43	
ς α	3	+	+	+	+	+	+	+	+	+	-		$\vdash$	+	+	+		Z U
⊢	4								1	ŀ	٥	96	-		7		11	MOM
20.0	١	$\dagger$	†	+	†	†	†	†	†	1				t	†	†		1977 BRMY WOMEN
00	3											Ĺ	L,	1		$oldsymbol{\perp}$		] a
٥	٥	10.75	10.50	10.26	10.00	9.76	9.50	9.26	9.00	8.76	a C		8.2P	8.00	7.76	7.60	OTAL	77
		10	2	2	2	( N	乚	<u> </u>	L	L	01	ユ	_	ω	Ľ		12	9.

STD ERROR	0.40	0.36
REGRESSION EQUATIONS	= (0,648)*F00T CIRC(IN)+(3,81)	= (0,540)*F00T LENGTH(IN)+(3,73)
~	0,49 0,592	0.592
ST DEV	0.49	0.45
MEAN	9,57	8,90
BRMY WOMEN	FOOT LENGTH	FOOT CIRC
1977	FOOT	FOOT

TABLE 35

A BIVARIATE FREQUENCY TABLE FOR FOOT LENGTH AND INSTEP LENGTH 1966 ARMY MEN

	TOTAL		-	၉	12	52	186	614	883	1743	1599	948	587	208	37	3	6682	
	12.50 12.75			L	-					L			L	L	L	L		
	50 1			1													1	
	5 12.				-	5											9	
	0 12.25	H		2	8	13	2	1						_			30	
	11.25   11.50   11.75   12.00	H			2	22	28	2			_						57	
	11.7			$\vdash$	1	7	29	46	8	_			-	-			124	!
	11.50	H		L	-						_	-		L				
	- 25			L		5	72	170	100	30	7			L			381	
	00						12	148	288	133	13						287	
ê	75 11.						4	41	332	438	94	2	1				918	
FOOT LENGTH(IN)	50 10.							9	133	775	467	29	9				1439	
FOOT L	10.25 10.50 10.75 11.00	H						2	1.3	317	989	225	41	2			1239	
									3	45	344	425	177	12	1		1001	
	10.00								2	2	40	208	195	49	3		505	
	9.75										1	30	139	81	9		257	
	9.50	H				_						3	24	55	61	2	103	
	9.26	H							_							_		
	9.00	$\prod$									1	1	3	6	9	1	21	
	8.75 9												1				-	
															1		-	
	8.50	H					-	-	-	-					_		-	
	8,25		T		L	$\prod_{T}$	$\mathcal{T}$	Ţ		J	$\prod_{T}$	J	$\prod_{i=1}^{n}$		_ T	<u> </u>		
		9.75	0	9 2 2		8 75	_	8 25	_		Ι.	120	Ľ		8	8.25	TOTAL	
					•					•		- •		•				

STD ERROR 0.22 0.18

REGRESSION EQUATIONS

(0,722)\*F00T LENGTH(IN)+(0,12)

0.898

ST DEV 0.51 0.41

MEAN 10.54 7.73

1966 ARMY MEN FOOT LENGTH INSTEP LENGTH TABLE 36

A BIVARIATE FREQUENCY TABLE FOR FOOT LENGTH AND INSTEP LENGTH 1977 ARMY WOMEN

						-												STD ERROR 0.19 0.15
F TOTAL	Ш	2	10	42	112	3	201	361	300	218		97	17	••		1330		3TD 0
50 111 7	9.75 10.00 10.25 10.50 10.75 11.00 11.50															<b></b> 1		.31)
11 26	3																	REGRESSION EQUATIONS 1.176)*INSTEP LENGTH(IN)+(1.31) (0.729)*FOOT LENGTH(IN)+(0.05)
		_		-												е -		NS 1)HT( 1)HT(
	2110		ď	١	9											12		REGRESSION EQUATIONS (1.176)*INSTEP LENGTI
	20 110		,	0	81	o	1									-	;	N EQU NSTEP OOT L
	26 10.			1	10	45	-		?							9	20	.55101 76)*[1
H IN	00 10.				7	43	g 3	3	7.7	,							100	REGRE (1.17
FOOT LENGTH(IN)	75 10.					1.		2	105	14							183	11 II (D (D
<u>.</u>	9.50	11						12	141	73		•					240	R 0.926 0.926
	192							4	70	156		19	2				293	DEV 1.49 1.39
	6 00 6	ונ							6	53	3	103	18				183	ST 0 0
	0 75 0	1.								6	,	43	4.3	-			96	MEAN 9.57 7.03
	0 00	- 1								-	-	9	2g	2			43	
	L	8.20						L				1		٥			- 11	1977 ARMY WOMEN FOOT LENGTH
•	L	8 00 R										Ļ			-			977 ARMY WOM 001 LENGTH NSTEP LENGTH
		8	8.50	8.26	8 00		314		2 7.25	7.00	_	_		8.26	00.9	5.76	TOTAL	1977 P F001 L
						-4	, 11			_	•			_ , , , ,	-			

TABLE 37

A BIVARIATE FREQUENCY TABLE FOR HAND BREADTH AND HAND LENGTH

	TOTAL		-	9	89	41	121	415	1092	1509	1696	1343	430	16	28	1		1899
	4.25				-	8	10	13	21	O7	1	2						99
IN)	6 4.00	†	1	S	3	18	37	76	165	126	98	30	6					267
HAND BREADTH(IN	50 3.75			I	4	17	89	249	644	779	689	357	69	۵				2879
HAND	3.25 3.50					-	2	62	246	534	725	763	226	=	6			2605
							_	2	19	99	93	184	125	=	=			539
	15   3.00								_	_	2	-	8	_				56
	2.35	9.50	100	27.50	00.8	8.75	8.50	9.50	8.00	٠,٠	7.60	7.25	2.00	9.70	6.50	6.25	6.00	TOTAL
		,				ſ	NI	JA	10	EN	7	۵N	RH	}				

STD ERROR	0.16	0.32
REGRESSION EQUATIONS	= (0,266)*HAND LENGTH(IN)+(1,51)	= (1,024)*HAND BREADTH(IN)+(3,90)
~	19 0.522	38 0,522
ST DEV	0.19	0,38
MEAN	3.50	7,49
1966 ARMY MEN	HAND BREADTH	HAND LENGTH

TABLE 38

A BIVARIATE FREQUENCY TABLE FOR HAND BREADTH AND HAND LENGTH 1977 ARMY WOMEN

			·										·
	TOTAL		1	10	99	116	281	339	316	176	31	9	1330
	3.76			-	1	2	2						8
TH( IN)	3.60		_	6	62	**	99	33	14				183
HAND BREADTH(IN)	3.26			~	26	63	192	186	160	63	و		969
<u>=</u>	H			L.		-	32	2	136	118	23	4	432
	0 2.76								2	-	6	_	13
	2.50	7 26 0	07.0	<b>8</b> .00	7.76	7.50	7.26		9.79	9:50	-1	30.00	
	•	Ľ		_	N	1	110	_	_	_	RH	_	

0.12 0.28	
REGRESSION EQUATIONS = (0.259)*HAND LENGTH(IN)+(1.30) = (1.398)*HAND BREADTH(IN)+(2.56)	
R 0.602 0.602	
ST DEV 0.15 0.36	
MEAN 3.08 6.87	
1977 ARMY WOMEN HAND BREADTH HAND LENGTH	
	MEAN ST DEV R REGRESSION EQUATIONS 3.08 0.15 0.602 = (0.259)*HAND LENGTH(IN)+(1.30) 6.87 0.36 0.602 = (1.398)*HAND BREADTH(IN)+(2.56)

TABLE 39

## A BIVARIATE FREQUENCY TABLE FOR HAND BREADTH AND PALM LENGTH 1966 ARMY MEN

TOTAL		12	82	487	1995	2588	1228	273	16	1		6681	
Н		-	9	91	22	17	9					99	
-		9	28	96	506	179	45	8				567	
50   3.7		2	38	293	1112	966	366	89				2879	
25 3.6			8	79	593	1199	265	120	=			2605	
			-	-	19	: 62	202	5	-	,		539	
					-		25	٤	9	,		56	
2.3		9.50	5.00	4.75	4.50	4.25	4.00	3.75	3.50	3.26	3.00	TOTAL	
	3.00 3.25 3.50 3.75 4.00 4.25	.75 3.00 3.25 3.50 3.75 4.00 4.25	. 75 3.00 3.25 3.50 3.75 4.00 4.25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6.25     5.00     3.25     3.50     3.75     4.00     4.25       5.00     1     8     39     28     6	75     3.00     3.25     3.50     3.75     4.00     4.25       5     6     1       1     8     39     28     6       4     79     293     96     16	6.26     5.00     3.25     3.50     3.75     4.00     4.25       6.26     5.00     1     8     39     28     6       4.75     4     79     293     96     16       4.50     1     61     593     1112     206     22	6.26     5.00     1.25     3.50     3.75     4.00     4.25       5.00     1     8     39     28     6       4.76     4     79     293     96     16       4.50     1     61     593     1112     206     22       4.26     5     192     1199     996     179     17	6.26         1         6.26         1         8         39         28         6         1         8         39         28         6         1         8         4.75         1         8         39         28         6         1         8         1         8         1         1         8         1         1         8         1         1         8         1         1         8         1         1         8         1         1         1         8         1         1         8         1         1         1         8         1         1         1         8         1         1         8         1         1         1         8         1         1         1         8         1         1         8         1         1         1         8         1         1         1         8         1         1         8         1         1         1         8         1	6.26         1         6.26         5         6         1         1 </td <td>6.26         1.00         3.25         3.50         3.75         4.00         4.25           6.26         1         6         39         28         6         1           4.76         4         79         293         96         16           4.50         1         61         593         1112         206         22           4.00         12         207         199         996         179         17           3.75         6         71         120         68         8         3</td> <td>6.26         1         6</td> <td>6.26       5.76       3.00       3.25       3.50       4.25         5.00       1       8       39       28       6         4.75       4       79       293       96       16         4.50       1       61       593       1112       206       22         4.00       12       192       1199       996       179       17         4.00       12       207       595       366       46       3         3.76       6       71       120       68       8       8         3.26       2       3       10       <td< td=""><td>6.26     3.00     3.25     3.50     3.75     4.00     4.25       6.26     1     8     39     28     6     1       4.76     4     79     293     96     16       4.50     1     61     593     1112     206     22       4.26     5     192     1199     996     179     17       4.00     12     207     595     366     45     3       3.76     6     71     120     68     8       3.26     2     3     10       3.00     2     3     10       3.00     2     3     2605     2879     567     65</td></td<></td>	6.26         1.00         3.25         3.50         3.75         4.00         4.25           6.26         1         6         39         28         6         1           4.76         4         79         293         96         16           4.50         1         61         593         1112         206         22           4.00         12         207         199         996         179         17           3.75         6         71         120         68         8         3	6.26         1         6	6.26       5.76       3.00       3.25       3.50       4.25         5.00       1       8       39       28       6         4.75       4       79       293       96       16         4.50       1       61       593       1112       206       22         4.00       12       192       1199       996       179       17         4.00       12       207       595       366       46       3         3.76       6       71       120       68       8       8         3.26       2       3       10 <td< td=""><td>6.26     3.00     3.25     3.50     3.75     4.00     4.25       6.26     1     8     39     28     6     1       4.76     4     79     293     96     16       4.50     1     61     593     1112     206     22       4.26     5     192     1199     996     179     17       4.00     12     207     595     366     45     3       3.76     6     71     120     68     8       3.26     2     3     10       3.00     2     3     10       3.00     2     3     2605     2879     567     65</td></td<>	6.26     3.00     3.25     3.50     3.75     4.00     4.25       6.26     1     8     39     28     6     1       4.76     4     79     293     96     16       4.50     1     61     593     1112     206     22       4.26     5     192     1199     996     179     17       4.00     12     207     595     366     45     3       3.76     6     71     120     68     8       3.26     2     3     10       3.00     2     3     10       3.00     2     3     2605     2879     567     65

STD ERROR 0.18 0.23 = (0,510)\*HAND BREADTH(IN)+(2,38) = (0.311)\*PALM LENGTH(IN)+(2.21) REGRESSION EQUATIONS 0.398 0.398 0,19 ST DEV 3.50 MEAN ARMY MEN BREADTH LENGTH 1966 HAND

TABLE 40

A BIVARIATE FREQUENCY TABLE FOR HAND BREADTH AND PALM LENGTH 1977 ARMY WOMEN

STD ERROR 0.13 (0,650)\*HAND BREADTH(IN)+(1.89) (0.359)\*PALM LENGTH(IN)+(1.68) REGRESSION EQUATIONS 0.483 0.483 0.15 ST DEY 3.08 MEAN ARMY WOMEN BREADTH LENGTH HAND 1977 PALM

TABLE 41

### A BIVARIATE FREQUENCY TABLE FOR HAND CIRC AND HAND BREADTH 1966 ARMY MEN

STD ERROR 0.29 (1.744)\*HAND BREADTH(IN)+(2.40) (0.325)\*HAND CIRC(IN)+(0.74) REGRESSION EQUATIONS 11 0.753 0.753 0.45 ST DEV 3.50 8.51 MEAN ARMY MEN BREADTH CIRC 1966 HAND HAND

TABLE 42

A BIVARIATE FREQUENCY TABLE FOR HAND CIRC AND HAND BREADTH 1977 ARMY WOMEN

26   6.50   6.75   7.00   17   17   190   6   6   190   11   13   197	HAND CIRCLINI	. AC 18 25 16 EG 16 75 7 7.00 7.25 7.50 7.75 8.00 8.25 8.50 101HL		2 4 6	8 81	903 343 120 13 696				-	300 201
26 6.50 6. 6 67 11 73	HAR	75 17.00 17.				12 203	180   173				197   376
		5 1 E En 18	00.00				67	, ,	0		11 - 73

REGRESSION EQUATIONS (2.058)\*HAND BREADTH(IN)+(0.93) (0.423)\*HAND CIRC(IN)+(0.01) R 0.933 0.933 0.34 ST DEY 7,26 MEAN 1977 ARMY WOMEN HAND CIRC HAND BREADTH

STD ERROR 0.12 0.06

TABLE 43

A BIVARIATE FREQUENCY TABLE FOR HAND CIRC AND HAND LENGTH 1966 ARMY MEN

																		STO ERROR	0,39	0.33
	TOTAL		9	0	41	121	416	1092	1609	1596	1343	430	16	28	1		6682	STD	0	0
	9 10.50				1			•						1			-		.12)	2)
	10.25				1	2	3	4	3		-						*		*)+(%	ნ. - (ე.
	9.75   10.00				2	8	9	7	2	4							22	SNOI	ENGTH(IN)+(4,12	CIRC(IN)+(3.92
ļ	9.50 9.		2		9	1	10	1.1	91	8	2						89	REGRESSION EQUATIONS	_	
	9.25 9.	-	3	*	11	26	19	26	64	30	15	1					298	NOIS	0.586)*HAND	0.420)*HAND
	9.00			3	2	12	19	131	127	85	87	4	1				484	GRES	3.586	0.450
HAND CIRCLIN)	8.75 8			-	-	29	104	240	238	193	83	19	9	L			016	R	11	= 11
HAND	8.50 8		_		4	9	103	304	418	411	226	26	_				1542	<u>«</u>	0.496	496
	8.25 8				2	13	42	166	343	394	356	82	12	2			1412	<b>&gt;</b>	45 0	38 0
	8.00.8			L		-	12	88	198	262	312	122	22	œ		-	1030	ST DEV	0.4	0.3
	. 75   8					,	L.	35	76	121	228	æ	37	-			667	MEAN	8.51	. 49
	7.50 7							L.	2	EE	2	15	=				169	A	<b>&amp;</b>	
	7.25 7							-	•	٤	12	=	6	<u> </u>			9	AEN		Ŧ
	7,00 7.									<u> </u> -	ŀ		-		1		2	ARMY		LENGTH
	1	9.60	9.26	9.00	_		_		7.76			7.00 1.00	_	6.50	6.25	6.00	TOTAL	1966	HAND	HAND

TABLE 44

A BIVARIATE FREQUENCY TABLE FOR HAND CIRC AND HAND LENGTH 1977 ARMY WOMEN

	TOTAL	Ţ.	-	10	99	116	182	330	316	92.	2	31	10		1330	
	8.50			1	1	-	2					,		-	ဖ	
	0 8.25			2	8	1	0		-						a	
	75 8.00			6	22	24	98	3:		B					88	
2	7.75			-	-	33	9		3	2	m	-			201	
HAND CIRC(IN)	26 7.				-	1	5 5			28	26	-	-		368	
HAND	7.00   7.26			,	J.	<b> </b> :		B	711	114	28		,  -		376	
	6.76 17.	7			-	-	<b>!</b>	21	*	67	52	-	  -	4	197	
	6.50 6.		-	1	1	1			13	5	34		  -	2	73	?
	8 25 8	7		1	1	+	1			(7)	4	٠  -	1	-	-	•
	8 00 8	٦							T	T				Τ	  -  -	
	١٩		8.25	B.00	2 7.76	7.60	上	0	ŀ	2	9.80	£ 6.25	₩ 90		0, 10	15 15 T

REGRESSION EQUATIONS (0.563)\*HAND LENGTH(IN)+(3.40) (0.623)\*HAND CIRC(IN)+(2.34) R 0.592 0.592 ST DEV 0.34 0.36 MEAN 7.26 6.87 1977 ARMY WOMEN HAND CIRC HAND LENGTH

STD ERROR 0.27 0.29

TABLE 45

A BIVARIATE FREQUENCY TABLE FOR HAND CIRC AND PALM LENGTH 1966 ARMY MEN

														STO ERROR	.41
	TOTAL		12	82	487	1996	2689	1228	273	16	1	6682		STD	0
•	20				L										
	26 10				-										.34)
	0 10.			2	9	2	1	1				*			3)+(3
-	9.76 10.00 10.26 10.60			+	8	8	1					27		CONS	ENGTH(IN)+(5.34
•	9.50		2	+	91	27	18	2				69		THUD	FR
	9.26		S	91	86	127	63	10				298		REGRESSION EQUATIONS	= (0.758)*PALM
9	8 00.8		2	14	٤9	197	166	32	9			181		GRESS	.758)
HAND CIRCLIN)	8.75			18	112	369	308	16	11			910		RE	0) =
HAND	8.50 8		2	91	105	643	607	235	34			1642		œ	419
	8.25 8		1	E	69	376	624	594	19	2		1412		>	45 0.419
	8.00 8.			3	27	213	436	276	71	4		1030		ST DEV	0.4
	Н			2	11	103	282	205	89	8		667			51
	7.50 7.75					22	88	69	58	1		169		MEAN	σ.
:						*	17	19	8	1		67	,	MEN	
	7,00 7.25						2	4	2	1	ı	10		ARMY	CIRC
		6.25	_	א	•	374	Ŀ	37		• 1		TOTAL		1966	HAND

TABLE 46

# A BIVARIATE FREQUENCY TABLE FOR HAND CIRC AND PALM LENGTH 1977 ARMY WOMEN

	TOTAL	6	,	2	304	693	336	24	-	1330
Ì	Н		I							
	8	Ļ	4		_		Н		4	
	8		١	_	3	-			1	פו
		1								٠.
	2.5	T	1			П	П	П		
. ;	H		ı	*	8	6				<del> </del>
	8	╀	4	_			_	Щ	4	
	œ			8	8	58	7		1	88
	7.25 7.50 7.75 8.00 8.25 8.50	1	1	1	*	8				
	7	†			Г					
	H	-	1	19	78	8	2	-		201
Ž	20	4	_		Ļ	L	L	Н	Щ	
: :	2			91	26	6	25	6		368
7				-	0	170	5			36
HHND LIKUIR	2.	t		r	r	T				
Ē	ı	ŀ	-	8	99	193	13	9		376
	7.00	$\downarrow$		L	L	匚	L	_		,
	۲.			6	۰	83	98	0		187
	L				-	5	6	"		31
	6.75	†		Г	Γ	T			┪	
	H			-	4	29	34	-	-	73
	20	Ц.		L	L	Ļ	Ļ	↓_		<u> </u>
	6.25 6.60					6	_	_		-
	ما							l		-
	3.2	lt	_	T	T	T	T	T	T	
	F	$\ $				-	1			-
	6.00	Щ	Т	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	
	8	مرا	ķ	وأج	ام		او	وإي	واع	TOTAL
		1	ľ	:	-	-	9	3.6	,	; 5
		1	N	7)	H)	J.	3	N	78	٠.

7 ARMY	HOMEN	MEAN	ST DEV	<b>œ</b>	REGRESSION EQUATIONS	STO ERROR
) CIRC		7.26		0.34 0.473	= (0,775)*PALM LENGTH(IN)+(4,25)	0.30
1 LENG	PALM LENGTH	3.83		0.21 0.473	= (0,288)*HAND CIRC(IN)+(1,80)	0.18

TABLE 47

A BIVARIATE FREQUENCY TABLE FOR HEAD BREADTH AND HEAD CIRC 1966 ARMY MEN

	TOTAL		1		1	2	8	22	69	139	266	523	101	816	1149	1008	792	627	290	191	71	25	6	6682
	5 7.00		1					1	1	2	2								_					۲
	50 6.75				-	2	1	2	7	11	18	28	24	7	10	3	3		1					118
1K)	25 6.50					3	2	13	28	19	63	137	149	117	142	83	38	18	*	2	1			882
HEAD BREADTHCIN	00 6.25						*	*	28	24	129	262	327	384	144	364	220	160	53	22	3			2448
HEAD 6	5.75 6.00						1	2	*	11	<b>58</b>	101	181	282	445	412	382	274	115	72	23	7		2303
									~		۵	*	18	43	105	140	155	161	103	57	34	12	8	950
	25   5.50										-1	1	2	2	ß	9	O7	14	=	8	10	•	-	73
	30   5.25														-		-							3
	5.00	26.25	25.00	35 36	2 20	24.25	24.00	23.7F	23.50	23.25	23 00	25. 25	22 50	20 9E	2000	21 75	21.50	21 25	21.00	20 75	20 50	20.25	20.00	TOTAL
										()	13	)	113	3 (	743	H								

STD ERROR REGRESSION EQUATIONS = (0.191)\*HEAD CIRC(IN)+(1.79) = (1.442)\*HEAD BREADTH(IN)+(13.43) R 0.525 0.525 0.23 ST DEY MEAN 6.01 22.09 ARMY MEN BREADTH CIRC 1966 HEAD HEAD

0.20

64

TABLE 46

A BIVARIATE FREQUENCY TABLE FOR HEAD BREADTH AND HEAD CIRC 1977 ARMY WOMEN

	TOTAL		-	_	*	13	01	36	59	91	147	174	205	229	148	901	71	- 56	14	1	1	1330
	0																					
	6.50				-	2	3	2	2	+	2	-			1							30
	6.25	$\prod$	-		<u> </u>	_	-	_	H	L	L	L	L		L		Н		Н		$\dashv$	
Ç	-	$\ $	~			ம	*	11	=	16	24	13	က	13	4	8						119
BREADTH( IN)	6.00	H	1		-	$\vdash$	-	-	$\vdash$	Н		$\vdash$	$\vdash$	$\vdash$	$\vdash$		$\vdash$					
READ	75				8	۵	8	12	30	43	99	7.1	74	73	31	13	9	1	1		7	431
HEAD B	5.3	$\prod$			1		1	9	8	27	91	77	2	9	94	69	38	16	2	1		628
포	20	Ц	4			L	L	· .	L	2	•	7	112	126	8	9	3	1				9
	9									1	8	ဗ	10	18	17	22	25	8	9			115
	.26	H	1	_	H	-	H	L	Н	H	H		_	Н	H	Н			Н	Н	$\dashv$	1
	9 1													1	1		2	1	2			-
	6.00	-25	12	2 12	2 2		9 8	3 %			3 5	3 12			3 5	3 %					5 2	[2]
		24.	24.00	32 36	22.00	23.00	22.50	63.00	99 50	20.00	200		•	01.00	200	١	20. 20	00 - 00 00 - 00	20.00	10.05	19.60	TOTAL
									(1	NZ	JO	¥7:	3 (	DU:	311							

STD ERROR	0.18	0.54
REGRESSION EQUATIONS	= (0.180)*HEAD CIRC(IN)+(1.86)	= (1.667)*HEAD BREADTH(IN)+(12.03)
		~
œ	0.548	0.548
ST DEV R	0.21 0.548	0.64 0.548
DEV	5.75 0.21 0.548	21.62 0.64 0.548
ST DEV		

TABLE 49

### A BIVARIATE FREQUENCY TABLE FOR HEAD LENGTH AND HEAD BREADTH 1966 ARMY MEN

ı	TOTAL	2	118	882	2446	2303	850	73	က	6682
	8.25 8.50 8.75 9.00					1				-
	50 8.75	1	1	9	8	2		2		20
	25 8.5		*	23	63	27	9			112
_			16	107	285	165	38	•		812
LENGTH! IN	75 8.00	*	34	261	724	718	234	=	_	1990
HERD	50 7.75	2	36	252	734	762	303	28	L	2116
	25   7.50		21	167	445	442	182	18	_	1274
	00 7.25		-	9	173	191	83	80		492
	6.75 7.00			9	22	24	-			63
	6.50 6.			L		-				~
	9	20.7	6.75	9.50	5 6.25	6.00	5.75	5.50	5.25	10 TAL

STD ERROR 0.29 0.23 (0.137)\*HEAD BREADTH(IN)+(6.84) (0.087)\*HEAD LENGTH(IN)+(5.34) REGRESSION EQUATIONS 11 11 0.109 0,109 0.29 ST DEY 7,66 MEAN 1966 ARMY MEN HEAD LENGTH HEAD BREADTH

TABLE 50

A BIVARIATE FREQUENCY TABLE FOR HEAD LENGTH AND HEAD BREADTH 1977 ARMY WOMEN

	TOTAL		30	119	431	628	116	7	1330
	8.00 8.25			2	2	9			67
	9.00		9	16	38	30		1	16
127	50 7.75		9	26	121	133	16		300
MEHD LENGISTIN	25 7.50		13	38	141	240	46	2	479
FEE	7.25		5	27	a	169	43	6	346
	75   7.00		_	a	25	42	12	-	06
	6.75	1		~		-			13
	6.50	1				6	,		8
	8.25		9.20	8.25	9.00	99	6.60	6.26	5.00 TOTAL

REGRESSION EQUATIONS (0.201)\*HEAD BREADTH(IN)+(6.21) (0.129)\*HEAD LENGTH(IN)+(4.80) 11 0.161 ST DEV 0.26 0.21 MEAN 7.37 5.75 ARMY WOMEN LENGTH BREADTH 1977 HEAD HEAD

STD ERROR 0.26 0.21

TABLE 51

A BIVARIATE FREQUENCY TABLE FOR HEAD LENGTH AND HEAD CIRC 1966 ARMY MEN

	TOTAL		<b>,</b>		-	ထ	æ	22	69	139	266	523	701	815	1149	1008	792	627	290	191	11	25	69	6682
	9.00						1																	
	8.75	H	1		1	1	3	2	+		2	3												20
	5 8.50					3	2	6	24	35	19	14	٤			2								112
IK)	30 8.25					1	2	7	34	67	124	173	106	57	- 28	12	1		Ţ		,			612
HEAD LENOTHCIN	7.75 8.00							1	7	38	109	271	412	445	422	190	75	15	3					1990
HEAD	7.50 7.									2	12	53	160	268	529	495	352	187	7	13	*			2116
	7.25 7.											8	1.4	**	159	271	162	284	134	7	13	3	9	1274
	7.00 7											1	2	-	10	38	71	136	98	98	36	14	3	492
	6.75 4														1		2	9	12	2	11	~	2	
	50	2	le	100										Ju										7
į	9	25.26	25.00	24.75	24.50	24.25	24.00	23.75	23.50		_	20.75	т.		20 00	_	21 50	21.25	21.00	20.75	20.50	20.25	20.00	TOTAL

(1.729)\*HEAD LENGTH(IN)+(8,84) (0.360)\*HEAD CIRC(IN)+(-0.29) REGRESSION EQUATIONS 11 11 0.788 0.29 ST DEV 7.66 MEAN ARMY MEN LENGTH CIRC HEAD 1966 HEAD

STD ERROR 0.18 0.39

68

TABLE 52

A BIVARIATE FREQUENCY TABLE FOR HEAD LENGTH AND HEAD CIRC 1977 ARMY WOMEN

	5 TOTAL		-	1	+	13	10	36	52	16	147	174	206	228	148	108	71	26	14	1			1330
,	0 8.25				1	3	1	3														,	
	75   8.00			1	2	20	9	16	23	17	12	8		1									66
18)	50 7.75					9	3	6	23	24	96	11	42	16	3							3	300
HEAD LENGTH(IN)	25   7.50				1			٤	9	13	8†	11	118	126	23	13	9						47.9
HEAD	00   7.25							1		3	11	18	++	75	72	72	41	8	-			3.5	346
	6.75 7.00												1	12	14	18	22	15	8	L		3	8
	6.50 6.															3	2	3	-		-		13
	6.25 6.														_				-	<u> </u> -	Ļ	Ļ	2
	<u>6</u>	24.25	24.00	23 75	200	200	200	20.00		20 00			Щ,	20 10	_	90 25	90.00	20.00	20.00	20.03	2 2	13:00	TOTAL

SI		_
REGRESSION EQUATIONS	= (0.326)*HEAD CIRC(IN)+(0.32)	= (1.943)*HEAD LENGTH(IN)+(7.31)
<u>~</u>	0.796	0.64 0.796
EAN ST DEY	0.26 0.796	0.64
MEAN	7.37	21.62
ARMY WOMEN	HEAD LENGTH	HEAD CIRC
1977	HEAD	HERD

TABLE 53

# A BIVARIATE FREQUENCY TABLE FOR HIP BREADTH AND HIP CIRC 1966 ARMY MEN

ŀ	10111				2	1	9	7	14	40	20	122	188	338	571	786	1036	1113	1113	720	380	137	34	*	6682
	.5 18.0																							1	-
		-				1																			8
	6 17	Ī						1																	-
	0 16.	T					3	2	2	3															10
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STD ERROR	0.40	1.26
REGRESSION EQUATIONS	= (0.276)  HIP CIRC(IN) + (2.83)	= (2.673)*HIP BREADTH(IN)+(2.15)
<b>~</b>	0.859	0.859
ST DEV	0.79	2.46
MEAN	13.07	37.09
1966 ARMY MEN	HIP BREADTH	HIP CIRC

TABLE 54

A BIVARIATE FREQUENCY TABLE FOR HIP BREADTH AND HIP CIRC 1977 ARMY WOMEN

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A BIVARIATE FREQUENCY TABLE FOR HIP BREADTH AND WEIGHT 1966 ARMY MEN

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STO ERROR

0.46

= (24.094)\*HIP BREADTH(IN)+(~155.82)

REGRESSION EQUATIONS = (0.028)\*WEIGHT(LB)+(8.62)

0.816

0.79

13.07 159.10

WE I GHT

ST DEY

MEAN

1966 ARMY MEN HIP BREADTH

TABLE 56

A BIVARIATE FREQUENCY TABLE FOR HIP BREADTH AND WEIGHT 1977 ARMY WOMEN

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81 0	31																													10NS 18)+(8:
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TABLE 57

A BIVARIATE FREQUENCY TABLE FOR HIP CIRC AND UPPER THIGH CIRC 1966 ARMY MEN

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HIP CIRC		37.09	2.46 0.852	0.852	2.46 0.852 = (1.110)*UPPER THIGH CIRC(IN)+(12.87)	1.29
UPPER THIGH	H CIRC	21.82	1.89	0.852	= (0.655)  wHIP CIRC(IN) + (-2.47)	0.99

TABLE 58

A BIVARIATE FREQUENCY TABLE FOR HIP CIRC AND UPPER THIGH CIRC 1977 ARMY WOMEN

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TABLE 59

A BIVARIATE FREQUENCY TABLE FOR HIP CIRC AND WEIGHT 1966 ARMY MEN

D TOTAL	-		-	,	1		2	a	=	61	13	21	43	63	71	88	121	191	200	245	313	378	434	295	584	989	630	531	518	363	287	185	98	28	22	01	3	6677
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62.0	$\parallel$	t		$\dagger$	$\dagger$	t	$\vdash$	t	t	t	H	-		l	-			-	-				L			H	-	-	-	-	$\vdash$	$\vdash$	-	-	_	-	H	
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39.0			L		L				L	L					9	9	22	36	81	98	120	85	26	34	18	9	*	2	***			L	L					899
38.0 3								L	L					1	2	2	7	8	28	89	102	165	136	140	81	33	11	-		1	1	L						785
																	1	2	8	14	38	80	172	212	205	183	82	26	80	2								9601
0 37.0	Ī																	1		2	4	17	52	131	204	284	224	131	49	11		2						112
36.0	T	Ī			Ī																	-	11	26	67	150	254	248	226	93	27	8	1					1113
36.0	T	T	T	-										-							3	-	3	1	$\neg$	Н			194	167	118	54	8	1	1		1	719
34.0	t	f	l	f	l	$\vdash$	-	$\vdash$		$\vdash$											_		1	-		2			38	Н		18	37	9	2		1	379 7
33.0	ł	-	l	H	l	L	ŀ		-	-												1	_		_		~	$\dashv$	-	$\dashv$	Н	Н	42	7	7	3	$\dashv$	
32.0	+		L	-	L		$\vdash$	$\vdash$	L	H	Н		Н		Н			+	$\sqcup$				_	$\dashv$	$\dashv$	$\dashv$			4	+	2 2	Н	7 4	1	Н	9		137
31.0	$\vdash$	H	L	$\vdash$	$\vdash$	-	L	_			H				$\exists$	Ц	Ц	4	4	4	-	$\dashv$	4	-	-				-						-	+		34
9			_	510	-10	) )	) le	- 10				) 0		10	, le	, -	)  -	, Je	16	,]=	10	) c	واد		10	310	10	10	) 0	,10	1	0		1	7			1
	280.0	2/9.0		7.002	2007	200	2000			200.0	225.0	200	215.0	010	208.0		(8	100		01		170.0	S.	160.0	155.0	150.0	145.0	Ş	135.0	130	125.0		118		100		96	TOTAL

STD ERROR 0.97 REGRESSION EQUATIONS = (0.097)\*WEIGHT(LB)+(21.66) = (8.722)\*HIP CIRC(IN)+(-164.41) 0.919 ~ 23.35 ST DEV MEAN 37.09 159.10 1966 ARMY MEN HIP CIRC WEIGHT

TABLE 60

A BIVARIATE FREQUENCY TABLE FOR HIP CIRC AND WEIGHT 1977 ARMY WOMEN

	TOTAL		-	-	2	-	9		8	2	۵	16	98	88	62	97	114	136	142	138	167	2	8	63	9	30	=	7	1330				
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	62.0		T		Ī												Γ				Γ		,										Service.
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	48.0	ł	+	╀	-	H	H	H	H	H	H	-	L		L	H	H	H	H	Н	-	-	L		H	H	Н	Н			SID ERRUR		ထ်
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							-		-																				2				. 73)
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	46.0	+	╀	╀	-	-	-	H	H	$\vdash$	H	H	L	-	H	H	-	-	Н	L	H	-	H	H	_		Н	Н				8	( <del>-</del> 1
	44.0	L		L			L	L		2	2	L	L	L	L			L			L		L			L			8	4	0	+(2	÷ Z
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IN)	41.0 42.0 43.0	T	T	T			_		4	1	_	2	9	9	2	1	2		П										28	-	REGRESSION ENOHILONS	(0,119)*WEIGHT(LB)+(21,87	(6.832)*HIP CIRC(IN)+(-124
HIP CIRCLIN	42.0	-	╀	$\vdash$	H	H	L	H	Н	L	Н		Н			Н	Н		Н		Н	Н	L	Н				Н	$\dashv$		<u> </u>	E 16	ПP
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	34.0 35.0 36.0	-	t	H	-	Н	Н	Н	Н	_	Н		_	Н		Н	-		Н	Н	H	Н	Н	-	7	_	-			č	טו חבי	ູ້	18.76
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	30.0	5	000			105.00				2000	130.061					2 2												96.0	TOTAL	ŗ	-	HIP CIRC	WE I GHT
		2	2	7 0	3 6	3 0	9	: [	1	1	2	١	(8	1	TH TH	01	HE	- 12	2	:[:	1	拒	:	:[5	٤١٥	٥	<u>'</u>	<u> </u>	12	4	7	Ξ	및

TABLE 61

A BIVARIATE FREQUENCY TABLE FOR INSTEP CIRC AND FOOT CIRC 1966 ARMY MEN

¥410;	1210	-		9	89	38	88	204	522	731	1180	1148	0700	906	447	226	177	48	24	17		-	8880	2005
- F	14:00							1															-	-
H	00 13.50			-																			•	-
ŀ	50 13.00			2	_	2	2		2														ď	<u>"</u>
1	00 12.50	-			2	8	13	9	1.1	80	9	3		~									;	Š
RC( IN)	11.50   12.00			_	2	91	28	63	7.4	89	**	2	12	_	6									106
Q. I	11.00 11				6	13	31	28	184	180	209	126	20	3	6	6	-		L				!	837
	10.50 11		1		-		13	87	186	586	448	367	252	138	38	-	2	-	_			-	✝	1788
	10.00   10		$\downarrow$				-	19	28	178	403	138	380	300	13	2	35	2	٥					2019
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1	8.00												•				١	Ц	1		9	1		ر 9
	L	12.50	12.25	12.00	11.76	11.60	11.25	11.00		10.60	_		6		97.5		8.76	8.60	8.25	8.00	7.76	7.50	7.26	TOTAL

STO ERROR	0.48	0.43
REGRESSION EQUATIONS	= (0,744)*F00T CIRC(IN)+(3,13)	= (0,601)*INSTEP CIRC(IN)+(3,57)
~	0.669	0.669
ST DEV	0.65	0.58
MEAN	10.46	9.85
1966 ARMY MEN	INSTEP CIRC	FOOT CIRC

TABLE 62

A BIVARIATE FREQUENCY TABLE FOR INSTEP CIRC AND FOOT CIRC 1977 ARMY WOMEN

	TOTAL	-		٥	13	27	70	201	213	283	273	156	99	22	-		1330
1	50 11.00	-	+		2	9	3	2	1					-			12
	00 10.50		,	2	٤	12	91	31	6	_							85
RC(IN)	9.60 10.00				-1	9	=	88	91	62	14	-					275
INSTEP CIRC(IN)	9.00					-	-	77	128	168	118	1	-	,			536
<b>3</b>	8.60 9.							,	2	2	1	100		,	1		363
	8.00 8			,						,	1	18	3 2		<u>.</u>	1	63
	7.50 8												<u> </u> -		1		4
	Ľ	10.75	10 50	10.00	10.26	10.00	9.76	9.60	9.26	9.00	8.75	8.50	8.25	8.00	7.75	7.50	TOTAL

REGRESSION EQUATIONS (0,862)\*FOOT CIRC(IN)+(1.57) (0,705)\*INSTEP CIRC(IN)+(2.38) 11 11 0.780 ST DEV 0.50 0.45 9.24 MEAN 1977 ARMY WOMEN INSTEP CIRC FOOT CIRC

STD ERROR 0.31 1) 0.28

TABLE 63

A BIVARIATE FREQUENCY TABLE FOR INSTEP CIRC AND HEEL-ANKLE CIRC 1966 ARMY MEN

-	IDINC		-	œ	14	52	96	174	384	649	713	1030	964	983	758	477	247	150	26	7	2	2	6682
-	14.00 14.50					-																	-
_	13.00																						
-	13.00	-	-	1	2	2	8											_					6
_	12.00 12.50		2		3	8	σı	11	11	6	4	3		2			1						64
C1RC(1N)	_		-		7	19	23	34	99	09	63	28	7	4			1						301
THSTEP CIRCCIN	╗	-		3	4	_ 17	38	69	117	158	172	181	104	46	13	14	ស						937
1 50 01	4	+		1	1	*	23	90	141	189	232	337	309	250	161	30	14	9					1788
00 01	ᅥ	-				1	3	10	48	103	205	328	381	385	252	156	76	33	10	1	1		2019
0 50 1	-1	-							*	56	36	107	142	242	240	153	93	9	18		2		1122
00 0			+							7	11	11	13	64	83	75	19	38	16	8		-	366
- C	4	-									1	*	2	2	6	80	7	10	12	4	4		96
00	3	0	9	le	) L	اد	2 14	,	3 4	,	3 4	) )  -	3 6		1	~	3 14		) ) ) (		2 6	- - - -	ه د
	-	16.00	15.75	15.50	15.0	15.00		11 50	14.25	1	_1_	_	72		ㅗ	_	ᆚ	100	36		11 25	3   5	TOTAL

STD ERROR	0.50	0.50
REGRESSION EQUATIONS	= (0,631)*HEEL-ANKLE CIRC(IN)+(1,98)	= (0,639)*INSTEP CIRC(IN)+(6,75)
≃	0.635	0.635
ST DEV	0.65	0.65
MEAN	10.46	13.43
1966 ARMY MEN	INSTEP CIRC	HEEL-ANKLE CIRC

TABLE 64

A BIVARIATE FREQUENCY TABLE FOR INSTEP CIRC AND HEEL-ANKLE CIRC 1977 ARMY WOMEN

<b>=</b>		- 1	ì								.							
TOTAL		-	3	11	22	48	108	146	166	258	204	172	119	49	16	80		1330
8																		
5 2		-	~	က	*	2	3											9
				9	11	17	38	89	4									88
10.	1			2	9	26	39	82	54	63	10	3	1					275
4					_	4	30	55	68	160	103	72	18	2				538
-							1	-	18	* * *	87	68	74	31	7	. *		363
ᅴ				ŕ					-	-	*	80	25	12	o	3		63
_														-	2	1		<b>→</b>
7.6	14.26	14.00	36	2 5	20.00	27.50	36	0 0	10.00	2000	20:21	2 0	200	07:1:	10.75	0, 01		TOTAL
	7,50 8.00 8.50 9.00 9.50 10.00 10.50 11.00	8.00 8.50 9.00 9.50 10.00 10.50 11.00	,500 8.00 8.50 9.00 9.50 10.00 10.50 11.00 1	,500 8.00 8.50 9.00 8.50 10.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 1	14.26 8.00 8.50 9.00 8.50 10.00 10.50 11.00 14.20 14.00 13.75 2 6 3	7,50   8,00   8,50   9,00   9,50   10,00   11,00   11,00   14,20   14,00   13,76   14,00   1,00	14.26     8.00     8.50     10.00     10.50     11.00       14.26     14.00     1     2     1       13.76     1     6     11     4       13.50     1     6     11     4       13.26     4     26     17     2	14.26     8.00     8.50     10.00     10.50     11.00       14.26     14.00     1     2     1     2       13.76     1     6     11     4       13.26     1     6     11     4       13.26     1     3     3       13.26     1     3     3       13.26     1     3     3	14.26     8.00     8.50     10.00     10.50     11.00       14.26     14.00     1     2     6     3       13.76     1     6     11     4       13.26     1     6     11     4       13.00     1     30     39     36     3       12.76     1     66     82     8     8	14.26     8.00     8.50     10.00     10.50     11.00       14.26     14.00     1     2     6     3       13.76     1     6     11     4       13.60     1     6     11     4       13.00     1     30     39     36     3       12.76     1     1     66     82     8       12.76     1     1     66     82     8       12.76     1     1     66     82     8       13.00     1     1     1     66     8     8	14.26     8.00   8.50   9.00   9.50   10.00   10.50   11.00         14.26     1     1       14.00     1     2     6       13.76     1     6     11     4       13.50     1     6     11     4       12.76     1     30     39     36     3       12.50     1     16     89     64     4       12.26     1     44     160     63	14.26     8.00     8.50     10.00     10.50     11.00       14.26     14.00     1     2     6     3       13.76     1     6     11     4       13.60     1     6     11     4       13.00     1     30     39     36     3       12.76     1     1     66     8     8       12.50     1     14     160     63     4     4       12.26     1     44     160     63     4     4       12.26     1     44     160     63     10	14.26     8.00   8.50   9.00   9.50   10.00   10.50   11.00	14.26     8.00   8.50   9.00   9.50   10.00   10.50   11.00	14.26       14.26       14.26       13.76       13.76       13.76       13.60       13.60       13.60       13.60       12.76       13.60       12.76       1 9.00       1 1 86       12.60       1 44       12.60       4 87       11.60       26       11.60       26       11.60       11.60       26       11.60       11.70       11.70       11.70       11.70       11.70 <t< td=""><td>14.26       14.26       14.26       13.76       13.76       13.76       13.60       13.60       13.60       13.60       12.76       12.76       1 1 2 6       12.76       1 26       1 30       12.60       1 1 66       1 26       1 1 66       1 2 6       1 44 160       1 4 87 103       1 1 6       1 1 6       1 1 6       1 1 6       1 1 6       1 1 6       1 1 6       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12</td><td>14.26       14.26       14.26       14.26       14.26       13.76       13.76       13.60       13.60       13.60       13.60       12.76       12.76       1 6 11       1 30       39 36       12.60       1 1 66       12.60       1 44 160       11.76       4 87 103       11.60       2 8 89       11.60       2 8 89       11.60       2 9 4       10.76       2 9 4</td><td>14.26       14.26       13.76       13.76       13.26       13.26       13.26       13.26       13.26       13.26       13.26       13.26       13.26       13.26       12.76       1   30       12.26       1   44       12.60       1   44       11.60       2   4       11.60       2   4       11.00       2   4       11.00       2   4       10.76       1   3       1   3       4   60       5   4       11.00       2   4       11.00       2   4       11.00       2   4       11.00       1   3       4   6       6   7       11.00       11.00       11.00       11.00</td></t<>	14.26       14.26       14.26       13.76       13.76       13.76       13.60       13.60       13.60       13.60       12.76       12.76       1 1 2 6       12.76       1 26       1 30       12.60       1 1 66       1 26       1 1 66       1 2 6       1 44 160       1 4 87 103       1 1 6       1 1 6       1 1 6       1 1 6       1 1 6       1 1 6       1 1 6       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12       1 1 12	14.26       14.26       14.26       14.26       14.26       13.76       13.76       13.60       13.60       13.60       13.60       12.76       12.76       1 6 11       1 30       39 36       12.60       1 1 66       12.60       1 44 160       11.76       4 87 103       11.60       2 8 89       11.60       2 8 89       11.60       2 9 4       10.76       2 9 4	14.26       14.26       13.76       13.76       13.26       13.26       13.26       13.26       13.26       13.26       13.26       13.26       13.26       13.26       12.76       1   30       12.26       1   44       12.60       1   44       11.60       2   4       11.60       2   4       11.00       2   4       11.00       2   4       10.76       1   3       1   3       4   60       5   4       11.00       2   4       11.00       2   4       11.00       2   4       11.00       1   3       4   6       6   7       11.00       11.00       11.00       11.00

# A RIVARIATE FREDIIFNCY TABLE FOR

			TOTAL	-	9	8	41	121	416	1092	1609	1596	1343	430	16	28			6662
	•.		0 6.25	-	9	9	9	1	1										12
H BIVHKIHIE FREUDENCI IMBLE FOR	=		75   6.00		E	*	20	23	26	3	3								85
BIVHKIHIE FREGUENCI INDLE F	<b>Z</b>		50 4.75			_	15	2	180	180	34	9	_						487
	MY MEN	TH( IN)	25 4.50				6	27	190	989	208	332	87						1996
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1966 ARMY	PALM LENOTH(IN)	4.00 4.25						97	214	707	980	834	2	-				2589
1 H   P	1961 196	g.	F	11						a	E S	286	587	248	146	-			1228
SI VHK	ב ב		3.76	11							-	- 2	15			=			273
I	<b>L</b>		5 3.60	11										L.	٩	7	<u>.</u>		16
	*1		0 3.25	11												-	-		<b></b>
			3.00	9.50	9.25	9.00	8.75	8.50	8.26	9.00	7.75	7.50	7.25	7.00	6.75	6.50	6.25	00.9	TOTAL
			•	_			- (	N	111	114	JN.	17	O	NUI	Ų			-	

= (0.537)\*HAND LENGTH(IN)+(0.15) = (1.260)\*PALM LENGTH(IN)+(2.24) REGRESSION EQUATIONS R 0.822 0.822 ST DEV 0.25 0.38 4.17 ARMY MEN LENGTH LENGTH 1966 PALM HAND

STO ERROR 0.14

TABLE 65

A BIVARIATE FREQUENCY TABLE FOR PALM LENGTH AND HAND LENGTH 1977 ARMY WOMEN

	TOTAL	-	21	56	116	281	338	316	176	31	5	1330
	4.76	-	-	-1								6
	6 4.50		6	88	30	3						70
TH( IN)	10 4.25			27	85	149	46	1				304
PALM LENGTH( IN )	75 4.00				_	128	274	169	82			693
£	H					_	2	146	147	21	_	336
	13.50								=	2	6	54
	0 3.25										-	-
	3.00	8.26	8.00	7.75	`	7.25		6.76	9.60	• 1	9.00	70 /0

STO ERROR	n	0.13
REGRESSION EQUATIONS	= (0,526)*HAND LENGTH(IN)+(0,28)	= (1.567)*PALM LENGIH(IN)+(U.77)
2		0.908
ST DEV	0.21	0.36
MEAN	3.89	6.87
1977 ARMY WOMEN	PALM LENGTH	HAND LENGTH

A BIVARIATE FREQUENCY TABLE FOR SHOULDER CIRC AND WEIGHT 1966 ARMY MEN

D TOTAL			က		-	-	1	a	=	13	13	21	43	29	77	88	121	161	200	245	313	378	434	552	584	989	630	531	518	363	267	185	85	26	22	92	9	6677
0.73 0.	-		-					-											_																			60
.0   56.0			-																																			1
64.0 65.0			L				_	-		2		2																										2
53.0 E4			L		-	-		2		2	-	-				1																						a
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47.0				Ц					2	Ц	1	1	*	4	18	$\dashv$	$\dashv$	$\dashv$	2	+	99	70	41	22	18	,	-	2						Ц				484
SHOULDER CIRCLIN)					_				_		1		-	3	Н	4	$\dashv$	$\dashv$	33	$\dashv$	104		102		Н	38	-	Ц	S	1	2	-					$\sqcup$	685
46.0			_								-	-		7		8	=	-	$\dashv$	43	٦		122		٦	7	┪				4 2	1	1		_			934
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43.0			4									4	-	4	-		-				٦	5 2				79 190	7		5 129			25	9	1				8 1034
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40.0		1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	-	1	9	+	m	-	=	11	Н	24	Н	S	<b>a</b>	2		108
34.0	H	1	1	1	1			1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2		-	-	9	7.	4	2	7	-	38
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0		1	1	1						1	1	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1							2	+	9
36.	275.0	270.0	266.0	260.0	266.0	260.0	2.5	240.0	235.0	230.0	225.0	220.0	216.0	210.0	206.0	200.0	198.0	190.0	185.0	180.0	176.0	130	165.0	160.0	156.0	150.0	145.0	9	136.0	200	125.0	000	118.0	0	108.0	9	95.0	TOTAL

STO ERROR

= (0.091)\*WEIGHT(LB)+(30.08) = (7.838)\*SHOULDER CIRC(IN)+(-190.11)

0.844

ST DEV 2.51 23.35

MEAN 44.55 159.10

1966 ARMY MEN SHOULDER CIRC WEIGHT

REGRESSION EQUATIONS

TABLE 68

A BIVARIATE FREQUENCY TABLE FOR SHOULDER CIRC AND WEIGHT 1977 ARMY WOMEN

	TOTAL	-	-	-	2	-	3		8	21	<b>6</b>	16	30	58	62	87	114	136	142	138	157	84	38	63	45	30	11	4	1330
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	48.				-		-													. !									2
· .	47.0	+	╀	╀	╀	Ļ	╀	L		L	L		L	L		Н	_		L	Н	Щ			-	_	_			
	0							l	-	2	١.																		က
	46.	+	t	十	$\dagger$	$\vdash$	╁	╁	$\vdash$		$\vdash$		-	H	H	Н		H	-	Н	_	Н	-		-	_	-	$\dashv$	
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	46.	T	T	T	T			Γ		1		3	Г	1	1														. 89
	9			L	L	Ĺ	L	L		L	L													L					
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	43.0	+	╀	╀	╀	L	-	L		L		Ц				Ц			Ц		Ц	Ц		L				4	
(M)	Н								-	2	ဗ	9	7	15	18	18	14	8	က	-									85
SHOULDER CIRCLIN)	42.0	+	╁	╁	╁	$\vdash$	┝	$\vdash$	Н	H	H	Н	Н		H	Н	Н	-	Н	Н				H	_			H	
2	0				l				2	2	2	1	89	18	14	23	28	18	22	8	3								152
JLOE	41.	T	T	T	T	T	T		Г		-		1	8	3	_	1	_			1	*							_
SHO	40.0		L	L		L	L						_		13	23	30	09	31	28	1								209
	40												4	4	9	15	26	38	46	48	45	12	4						<b>60</b>
	0.	1	L	╀	Ļ	L	L	L	_		Ц	Ц			L	1	2	3	•		4						Ц		248
	38														9	2	12	16	23	33	51	32	20	14	9	1			218
	38.0	+	┝	╁	+	$\vdash$	╁	-	Н	Н		Н	Н	Н		$\dashv$	Н	Н	Н	Н							Н	$\dashv$	
	0.															-	-	+	13	18	42	31	42	28	13	S	2		200
	37.	T	T	T	T	Г	T		П			П	П								3	_			2	•	3		
	36.0		L	L																		1;	25	16	17	~			88
	_	Ī																			2	1	-	2	11	11	က	2	38
	35.0	$\downarrow$	L	L	$oldsymbol{\downarrow}$	Ļ	1	L	Ц	Ц	Щ	Ц		Ц	Щ	Ц	_	Ц	Ц				Ц	Ш	_		Щ	$\dashv$	
- 1	$\neg$																								-	4	က	-	<b>a</b>
	34.0	+	+	+	+	-	┝	$\vdash$	H	Н		Н	Н		-	$\dashv$	$\dashv$	$\dashv$	Н	$\dashv$	-			H	H	-	_	$\dashv$	$\dashv$
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		220.0	219.0	210.0	206.0		186.0	20.00	200		2 5	185.0						125.0	3 6	125.0		112		2020		2 2		88	TOTAL
	•								•				(8	נד	TH	91	HE				,			٠					

STO ERROR	1.17	10.38
REGRESSION EQUATIONS	= (0.094)*WEIGHT(LB)+(27.09)	= (7.414)*SHOULDER CIRC(IN)+(-160.82)
<b>œ</b>	0.833	0.833
ST DEV	2.11	18.76
MEAN	39.51	132.11
1977 ARMY WOMEN	OULDER CIRC	WEIGHT

TABLE 69

## A BIVARIATE FREQUENCY TABLE FOR STATURE AND BUST/CHEST CIRC 1966 ARMY MEN

	TOTAL	Ţ.	•	13	11	22	33	70	130	186	339	518	712	911	1052	1111	796	478	217	63	16		-	6682	
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	77	1						1	2	1	1	2	1		1		2							11	
	0.96 0.						1	3	3	1	3	4	8	4	9	2	2							39	
	.0 75.0						8	1	1	8	8	12	23	7	12	. 8	2	2						87	
	73.0   74.0					1	8	+	4	14	17	23	23	53	28	27	12	10	2					199	
	o.		1	2	1	9	2	9	14	12	43	36	11	63	85	41	33	11	8					372	
	.0 72			3	1	_	_	3	20	21	34	29	64	68	100	36	19	20	9	2				544	
(X)	70.0 71			3	2	2	2	12	16	25	99	89	35	112	123	123	74	01	18	_		_		773	
STATURE( IN )	69.0 70			2	2	4	2	11	19	30	43	36	96	168	149	146	103	44	24	2				937	
ST	0.			8	2	-	6	10	22	58	33	69	119	141	183	176	134	74	36	6		_		1043	
	67.0   68			_	2		-	2	2	23	2	99	97	106	169	206	118	91	35	6	3		_	970	
	96.0 6			_		2	3	•	2	67	26	48	7	66	101	161	118	85	35	=	9			751	1
	65.0 8	4		_		_	-	3	9	8	23	25	38	89	7.	18	99	28	27	o	_	_	_	476	1
	64.0			_			_		2	6	7	10	16	27	35	42	47	27	16	8	8			236	1
	63.0			L	L		-	_	_	7	8	-	=	1.1	13	18	21	1.0	8	80	2	_	L	136	1
	62.0			_	L	_	_	L					-	*	8	12	,	12	2	$\vdash$			L	89	d
	61.0						L		L	-				2	3	9	6	_	3		6			36	$\frac{1}{2}$
	80.0	H		L	-	lacksquare			_		_	$\vdash$		-			4	2				$\vdash$	-	on .	$\frac{1}{1}$
	69,0		Ţ							] 5 c			<u>L</u> ₹		-   -	  - •			  -  -	] =]«				3 4	1
		0 07		9 0				_	-	2 :	_	7	200	S	2 6		_		33.0	35.0	2 6	2 6	2 2	70TAL	

1966 ARMY MEN	MEAN	ST DEY	œ	REGRESSION EQUATIONS	STD ERROR
STATURE	68,71		2,60 0,245	= (0,242)*BUST/CHEST CIRC(IN)+(59.77)	2,52
BUST/CHEST CIRC	36,92		2,63 0,245	= (0,248)*STATURE(IN)+(19,88)	2,55

TABLE 70

A BIVARIATE FREQUENCY TABLE FOR STATURE AND BUST/CHEST CIRC 1977 ARMY WOMEN

60.0   61.0   1   4   2   4   2   4   1   2   4   1   2   1   4   1   1   4   1   1   1   1   1	TOTAL			[	2		2	11	11	32	98	93	164	217	193	192	179	105	99	6	8		1330
60.0   61.0   62.0   63.0   64.0   65.0   66.0   67.0   68.0   70.0   71.0	73		+													1							
60.0   61.0   62.0   63.0   64.0   65.0   66.0   67.0   68.0   70.0   71     1	$\Box$	$\dagger$	t		1							1	1	2	1		1						9
60.0   61.0   62.0   63.0   64.0   65.0   66.0   67.0   68.0   69.0   70.	71.0		$\dagger$		1	-	1			1	-	2	2	1	2	1		1					11
60.0   61.0   62.0   63.0   64.0   66.0   66.0   69.0	70.	-	$\parallel$	t			1			1	1	2	9	9	1	9	2	2	1				27
60.0   61.0   62.0   63.0   64.0   65.0   66.0   67.0   68.     1	69		$\dagger$	$\dagger$			1	_	1	2	9	9	9	12	8	2	9	1		 			20
60.0   61.0   62.0   63.0   64.0   65.0   66.0   67.0	68.	+	$\mid$	1						1	11	10	13	13	17	8	4	3	3	_			06
60.0   61.0   62.0   63.0   64.0   65.0	67.	+	  -	+				3		9	3	11	16	1.3	16	23	9	13	2				911
60.0   61.0   62.0   63.0   64   1	. 66.0	-	+	$\frac{1}{1}$	_				2	8		11	26	44	34	24	21	6	-	_	-	1	1 83 1
60.0   61.0   62.0   63.0   64   1	65.0		$\dagger$	1				2		2	6	10	28	36	21	59	28	14	6	2	<del> -</del>		161
60.0   61.0   62.0   63.   1	9	+	t	1	2			-	2	3	2	12	22	24	32	33	31	16	6	-	-		194
60.0   61.0   1   1   1   1   2   3   3   1   4   5   1   1   1   1   1   1   1   1   1	63.		$\dagger$	1				-	3	4	12	14	20	36	24	26	28	71	7	2			189
6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Н		$\mid$	1				_	-	ဗ	3	2	6			24	19	1.4	=	<u> </u>	2		122
6 6 6	$\vdash$		$\dagger$	†				r		2		4	4	2	14	2	20	01	9	6	-		08
	60.		$\dagger$	1				_				-	2	2	3	4	=	ع	9				36
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2 2 1 1 1 1		$\parallel$	1	1	_						2			2	-			_	_		-		٦
1 1			$\dagger$	1							-			_									1
66.0 60.0	56,	47.0	46.0	45.0 H	0			) ; ;			200		200	200			3 6	200		2 6	200	2000	TOTAL

STD ERROR REGRESSION EQUATIONS (0,246)\*BUST/CHEST CIRC(IN)+(55.61) (0,232)\*STATURE(IN)+(19.83) ST DEV 2.57 2.49 MEAN 64.15 34.72 1977 ARMY WOMEN STATURE BUST/CHEST CIRC

TABLE 71

## A BIVARIATE FREQUENCY TABLE FOR STATURE AND HIP BREADTH 1966 ARMY MEN

	TOTAL			2	1	10	26	64	203	506	1018	1481	1784	1104	389	74	91		6682	
	0 /8/ 0											1					-			
	0 78.0	1							3	1	3	2							<b>a</b>	
	76.0 77.0						2	1		3	3	1	1						1.1	
	75.0 76					-		8	4	8	8	8	အ				L		38	
	74.0   75						2	9	11	16	22	138	2	2		L	L		83	
	73.0 74					-	-	9	28	38	29	36	28	8					188	
	72.0   73		_		L	•	2	*1	20	51	100	82	63	عِ	•	-	-	$\downarrow$	372	-
	21.0 17				_		3	a	23	78	101	153	122	9	۳				544	
(H)	1.0 2.0					ŀ	9	-	38	98	150	211	184	20	-		-		773	
STATURECIN	69.0 70.0			L		1	9	2	22	78	182	222	264	196	18	1	1	-	937	
213	68.0 6	L	L	-		1	\w_	-	22	2	138	948	327	100	9	-	1	1	1043	_
	67.0 6	-					-	6	=	3	0	15	204	:	2 8	20	1	4	970	
	66.0 6	  -	L	-	1	ŀ	1	-	=		: 2	١	200		200	+	+	-	761	
	65.0   61	1	L		ļ	$\downarrow$		-		15		3 6				3	3		178	
	64.0   6	1						-	,	, ("	, a		3	3 8	200		2	*	236	)
	63.0 6	1	L	1	$\downarrow$	1	1	$\downarrow$	ŀ	-	4	1	***	6		*	1		135	?
	62.0 6	ł		1	1	$\downarrow$	-	1	ļ	-	1	ľ	1	1	9:	1		2	ğ	<b>&gt;</b>
	61.0 6	1		1	$\downarrow$	$\downarrow$	1	$\downarrow$			ŀ	1	<b>∦</b> ·	<b>!</b> !		9	2	2	33	, -
	80.0	-		1	$\downarrow$	$\downarrow$	$\downarrow$		$\downarrow$	$\downarrow$	$\downarrow$	1		*	- •	7	9	-	٥	•
	59.0 8		$\prod_{i=1}^{n}$						ŀ	1								T	-	•
		_	18.0	17.6	17.0	16.6	16.0	₹ 16.6	₩ 16.0	5 14.6	14.0	13.6	a. 13.0	₹ 12.6	12.0	11.6	1.0	5	10.0	5

ST		0.71
REGRESSION EQUATIONS	= (1,440)*HIP BREADTH(IN)+(49.89)	
œ	2,60 0.437	0.79 0.437
ST DEV	2,60	0.79
MERN	68.71	13.07
1966 ARMY MEN	STATURE	HIP BREAUTH

TABLE 72

A BIVARIATE FREQUENCY TABLE FOR STATURE AND HIP BREADTH 1977 ARMY WOMEN

TOTAL	1				-	10	11	47	102	166	248	296	223	142	28	91	4	1330	, =1
73:0				-				1											,
72.0				-	-					+	2							9	
0 71.0					<u> </u>				2	2	*	9						11	
0 70.0	-							3	9	9	2	6	9					23	
0.0							_	9	10	8	13	8	2	-				20	
0.89						2	3	9	81	=	24	13	8	9				08	
66.0 67.0				L		•	2	9	2	2	26	23	18	2				116	
66.0 66					-	-		G	13	ĩ	43	4.7	23	12	_	2		183	
64.0   66				ŀ	1	60	2	6	=	2	38	97	36	8	-			161	
63.0 64				1			CC.	Œ	18	23	36	2	34	2	2	6		197	
62.0 6				1	$\downarrow$	-		0	٥	=	32	23	=	22	2	-	2	188	
9 0.19			-	1	1	1		•	16.	4	=	23	333	12	2	(7)	-	122	
60.0 6		1		1	1	$\downarrow$	ļ	-	•	<u> </u>	· α	, 5	=	15				8	
59.0 6		1	1	+	1	$\downarrow$	1	ļ°	,	-	•	•	10	• •	1	.   ^	1	38	
58.0 5		$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	1	$\downarrow$	-	+	-  -	•	1		"	\ <u>-</u>	-	2	
57.0 5		1		1	$\downarrow$	1	1	1	-  -	1	$\downarrow$	-	1	1	1	1	-	-	
56.0   5									9		9	·	1						
<u>.</u>	19.5	19.0	18.5	18.0	17.5	17.0	≥ 16.5	18.	16.	16.	14.	14.	₹ 13.	13.0	12.6	12.0	11.6	11.0	

STD ERROR		0.88
REGRESSION EQUATIONS	= (1,059)*HIP BREADTH(IN)+(49.41)	= (0.149)*STATURE(IN)+(4.36)
œ	0.398	0.398
ST DEV	2.57	0.96
MEAN	64.15	13.92
1977 ARMY WOMEN	STATURE	HIP BREADTH

TABLE 73

## A BIVARIATE FREQUENCY TABLE FOR STATURE AND HIP CIRC 1966 ARMY MEN

- 1	TOTAL	-			8	-1	29	7	14	40	70	122	188	339	571	785	1036	1113	1113	720	380	137	ž	4	6682	
	0 79.0			-										1		-					1	1				
- 1	0.8								-					2	9	_			-						Ø	
	.0 77.0								_			2		+	-		1	-	-						11	
	75.0 76.0									9		2	2	ω	2	۳.	9	9	9	_					39	
	74.0 75						-	2		2	+	9	2	10	13	12	13	11	9	-					87	
	0			L						3	٠	29	18	20	28	39	22	30	20	7					199	
	72.0 73		L		_	L	-	2	2	8	2	2	18	28	29	24	9	89	38	14	2	2			372	
	•	ig						8	2	3	=	16	30	38	99	78	101	36	69	33	11	2			544	
1K)	70.0					_	-	L	3	_	12	24	53	67	7.4	124	136	123	120	89	19	1			773	
STRTURE( 1K.)	69.0 7	-	-	-	L		-		7	2	6	20	20	19	93	134	149	191	184	80	36	9			937	1
ST	0.0	-	1	$\downarrow$	-	-	L		-	6	2	18	26	48	76	122	191	197	192	T	T	=	2	-	1043	1
	67.0 6	-	-	-		-	-				9		20	39	20	98	149	176	183	129	73	54	6		970	
	86.0 6	+	-	-	L	_	-	_			F	F	9	2	┝	82	F	T	┢	H	H	5	$\vdash$	-	761	1
	65.0	-	-	-	-	-	$\downarrow$	L	  -				-		$\vdash$	$\vdash$	77	╁	┝	$\vdash$	52	┢	┞		476	1
	64.0	-	$\downarrow$	-	-	-	-	ŀ	-		-	8	H	3	F	╁	+	╁	$\vdash$	╁	H	-	$\vdash$	6	23	1
	63.0		$\downarrow$	+	-	$\frac{1}{1}$	_	-	L	-	-		1	-	-	12	-	7	H	╁	18	13	┞	_	58 135	1
	62.0	$\parallel$	$\frac{1}{1}$	+		$\mid$	+	-	H	ig	$\frac{1}{1}$		-	-	1	-		$\vdash$	101	$\vdash$	2	-	_	-	30	$\dashv$
	61.0	$\parallel$	+	+	+	+	+	l	+	$\frac{1}{1}$	+	+	-	-	+	+	  -					-		+	6	┨
	60.0	$\parallel$	+	+	+	+	+	-	+	+	+	-	+	+	+	-	+	+	-	-	-	+		+	-	- 
	69,0		  e	  -	80.0 80.0	49.0	48.0	43:0	48.0	46.0	44.0	43.0	42.0	41.0	0.04	39.0	38.0	<u>니</u>	36.0	36.0	9:0	33.0		<u>-</u>	30.0	1
	•	63.0	52.0	51.0	20	64	48	ş	<del>=</del>	46		_	28 28	_	_	я 1 н	_	ရ	<u></u>	8	ल	ကို	32.	31	<u> </u>	븹

STD ERROR 2,44 = (0,370)\*HIP CIRC(IN)+(54,98) = (0,330)\*STATURE(IN)+(14,42) REGRESSION EQUATIONS R 0.350 0.350 ST DEV 2.60 2.46 68,71 37,09 MEAN · 1966 ARMY MEN STATURE HIP CIRC

TABLE 74

A BIVARIATE FREQUENCY TABLE FOR STATURE AND HIP CIRC 1977 ARMY WOMEN STATURECIN)

					•	•			:																~	:		
O TOTAL					1	1	2	6	9	14	28	46	101	167	193	241	196	170	84	99	25	9	2	1330	STD FRRUR	C		2.26
0 73.0	T											1			·												_	
0 72.0					_							1		1	3	1								9		C	40,03	. 93
0.17.0												2	2	+	-	2		I .						=	<u> </u>		<b>-</b>	+(11
0 20.0	-										3	2	2	3	29	9	3	7	-					27	FOURTIONS		CIRCLIRI+	TURE(IN)+
0.69 0									1		9	*	9	16	٤	9	-	-						90	FOLIA	ŀ		TURE
0 88.0	T	T								8	60	6	19	==	14	16	2	2		-				06	NO		)*H	*STH
0   87.0		T						6	9	عا	84	2	01	18	23	19	18	6	~	-				116	NULSSERUSA		473	400)
0 86.0					-		-			-	۵	8	22	33	32	33	26	26	8	-	-	_		193	ď		 -	0)
.0 65.0		T					-		_	3	4	4	*	23	23	17	26	28	6	6	2			161				- <del></del>
94						_				_	2	8	16	18	24	40	41	26	10	8	-			194	<u>~</u>	<u>.</u> .	U: 4 ]	0.41
0 63.0												9	2	19	33	42	31	24	12	2	9		1	189	טבע	֓֞֝֞֜֜֜֝֞֜֜֝֓֓֓֞֜֜֜֜֜֓֓֓֓֜֜֜֜֜֜֜֜֜֜֓֓֓֓֜֜֜֜֜֜֜֜	7.57	48
0 62.0	T	T			T					T	2	2	8	6	=	19	23	25	13	80	9	_	-	122	L	5	7	ä
0   61.0			T	T	T	T	T					-	3	6		2	=	=	2	2	4	3		08	2	. L	٦ <u>.</u>	29
0.09 0												-		-	2	7	2	2	8	2	2	-		36	N C	;	64.	37.
0 69 0		1				Ī						T	Ī	-		-	-	-	6	2	6.			18	2	<u>.</u>		
.0 58.0					T	Ī							-				~	-		_				7	NEW THOMEN	2		
19							<u> </u>	T									-							1	VMOO		JRE	CIRC
26,0	63.0	62.0	61.0	20.0	69.0	0.8	5	68.0	10.0	÷	43.0	42.0	0:14	0.0	39.0	38.0	37.0	38.0	36.0	34.0	33.0	32.0	31.0	TOTAL	6601		STATURE	HIP C
									_		1)	วช		٦	IH												•	

TABLE 75

A BIVARIATE FREQUENCY TABLE FOR STATURE AND SHOULDER CIRC 1966 ARMY MEN

	TOTAL		6	1	6	6	17	49	80	140	290	484	989	935	1132	1036	829	670	280	108	96	6	60	8682
	79.0				L	L						_	_				L	_	$\vdash$		L		L	
	78.0	-	Н		$\vdash$	L	H	-	H		H	H	L		-	-	H		L	-	L	_		
	77.0		L		L	L	L	L	L		L	L		3	2		L		L	_	L	_	L	8
	76.0	L	Ц		L		_		3	2	1	2		_				1	L		L			=
	0				7		-	L	3	3	2		8	11	*	4		-	1					39
	36 0.						2	3	8	9	6	14	18	13	٤	8	+	1	1					83
	0 74					2		9	4	11	13	24	33	32	38	18	13	3	1			_		199
	.0 73.				1	1		6	8	15	53	37	49	09	99	48	33	18	8	2				372
	0 72				1		2	1	8	19	43	63	63	83	68	84	49	26	8	9				544
	71.					1	7	9	16	22	44	98	88	116	142	111	79	54	18	9				779
STRTURE( 1K	10.0				2	3		6	14	20	43	7.1	13	99	162	46	801	69	35	9	1			937
STRTU	69.0	Ц	~	1	1	1		9	80	4	36	99	98	27 1	99 1	182 1	160	83	46	13	2			043
	68.0		-	-	1	-	2	3	9	2	+	52 (	85	30 13	٦	H	٦	-	47	7	6	2	2	_
	67.0		1	-	-	_		3	9		$\dashv$	$\dashv$	$\dashv$	-	172	165	128		4	-	_	Н		970
	66.0		4	-	-				4	$\dashv$	$\dashv$	$\dashv$	-	92	136			73	41	17	10	2		761
	66.0		4	4	4			2	2	9	13	18	36	64	76	99	83	9	27	18	*	Ц		478
	0	4	4						7	2	9	9	=	32	24	33	36	43	21	6	6	-		236
- 1	63.0 64									~	7	۵	6	12	24	13	=	23	13	6	8			136
1	-									Ì		-	6	۵	g	-	9	=	م	ဖ	_			28
1	.0 62.0											-	-		و	2	4	و	9	4	2			35
	9	1	1	1			1		7	1	7	-	1	-	1	1	2	1	60	2	7			6
• 1	9	†	+	+	1	1	1	1	-	1	1	+	+	1	1	1	1	1	+	+	+		1	
	69,0	22.0	56.0	55.0	24.0	53.0	62.0	21.0	20	0.67	-	_		_	-	43.0	_	0.14	0.04	0.66	0.86	97.0	38.0	TOTAL

STO ERROR

2,48

(0,308)\*SHOULDER CIRC(IN)+(54,98)

0,297

ST DEV 2.60 2.51

> 68,71 44,55

STATURE SHOULDER CIRC

MEAN

1966 ARMY MEN

REGRESSION EQUATIONS

(0.287)\*STATURE(IN)+(24.83)

TABLE 76

A BIVARIATE FREQUENCY TABLE FOR STATURE AND SHOULDER CIRC 1977 ARMY WOMEN

	TOTAL	2	2	3	7	8	20	92	152	209	248	219	200	69	39	S	1	1330
	73.0	+	-	-								1						<b>,1</b>
	72.0						1	2				2						9
	0 71.0			-		1	_	4	1	1	2							11
	0 20.0				-		2	2	8	9	4	2	3	1				27
	0.69 0.	-				1	3	8	11	6	8	9	3					90
	67.0 68.					2	9	6	14	22	16	11	6		1			06
	66.0 67		-		-	2	9	12	12	23	17	20	14	٤	1			116
STATURE( IN)	65.0 66	-	1		-		6	19	30	32	49	35	19	9			-	193
STATU	64.0 6					2	=	8	23	63	36	32	33	12	ည	_		191
	63.0 6		-	- 2	-	_	4	6	21	24	49	33	31	12	0	-		194
	62.0 6		_	_	-	_	۵	Ξ	12	38	34	53	34	=	6	3	_	189
:	61.0 6		-		L	_	2	9	80	=	18	23	27	17	8	-	L	122
	60.0		-		Ļ	_		2	8	2	Ξ	17	19	=	9	2	L	- 6
:	69.0		1						-	_	7	-	10	9	4	-		36
	58.0	4	+	_		_	_		_	၉	2	3	2	8	-			18
	57.0 E		-		$\perp$		L	L	-	2		2	L	L	-	L	L	2
	56.0		<u> </u>								-							
		49.0	48.0	4.		א) קיים איים איים איים איים איים איים איים	`	S C	_	_	٠.	אר אור אור			200		0 0	33.0 TOTAL

STO ERROR	2,42	1.99
REGRESSION EQUATIONS	= (0.404)*SHOULDER CIRC(IN)+(48.19)	= (0,272)*STATURE(IN)+(22,06)
œ	0,331	0,331
ST DEY	2,57	2,11
MEAN	64,15	39,51
1977 ARMY WOMEN	STATURE	SHOULDER CIRC

TABLE 77

A BIVARIATE FREQUENCY TABLE FOR STATURE AND SLEEVE INSEAM 1966 ARMY MEN

74.0   75.0   76.0   77.0   78	87 39 11 9 1
76.0   77.0   78.0   3   1   1   1   1   1   1   1   1   1	99 11
76.0 77.0 0 17.0 0 1 2 2 4 1 1 2 2 1 1 2 1 2 1 2 1 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1	99 11
0 2 3 5 4 3 6 0	33
0 2 3 5 4 3 6 0	33
	87
1 4 8 8 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	199
1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	372
69.0   70.0   71.0   72.0   1   2   8   1   1   8   8   1   1   8   8   1   1	544
8 8 25 57 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	779 6
0 70.0 1 1 104 1 1 193 1 1 193 1 1 1 1 1 1 1 1 1 1 1 1	937 7
STATURE(IN)  1 69.0   70.0  22 40  70 104 1  86 227 2  86 227 2  86 281 1  80 193 1  10 3 2  1 1 1  1 1 1	
22 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1043
67.0   1   1   1   1   1   1   1   1   1	970
66.0 6 109 109 109 109 109 109 109 109	761
	476
1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	236
0 64.0 11 11 13 19 4 4 1 17 17 17 17 17 17 17 17 17 17 17 17 1	196
0 <del>63</del> 0 14 14 14 14 14 14 14 14 14 14 14 14 14	89
9 4 4 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	38
9	6
1	$\dashv$
	_
37 EEVE (NASEAN) (NA)	TOTAL

STD ERROR	1.77	0.72
REGRESSION EQUATIONS	= (1,806)*SLEEVE INSEAM(IN)+(34,16)	= (0,296)*STATURE(IN)+(-1,21)
œ	0,732	0,732
ST DEV	2,60 0,732	1,05
MEAN	68,71	19,13
1966 ARMY MEN	STATURE	SLEEVE INSERM

TABLE 78

A BIVARIATE FREQUENCY TABLE FOR STATURE AND SLEEVE INSEAM 1977 ARMY WOMEN

	TOTAL	ļ	7	7	17	34	97	156	190	263	247	186	103	38	9	4		1330
	73.0	$\downarrow$										_						
		ľ	7															
	0 72.0			2	2	1				1								6
	70.0 71.0				+	3	3			1								
	70.0	+	_			Н	L			Н			_					
٠.	69.0	ľ	1		٤	9	9	9	2									27
	Н			65	2	4	13	13	+	3								90
-	. 68.			2		7	-25	26	15	13	2							90
	66.0 67.0 68.0					8	21	27	29	20	10	2		_				116
2	96.0			-		2	16	38	48	53	27	2	2	_	$\mid$			
RE(1	65.0	4	_	L	L		F	3	4	ص	2		L	L	L			193
STATURE( IN)	64.0   6					9	9	18	32	54	48	25	ဇ					191
							4	=	59	64	47	24	12	6				194
	63.0						-	=	22	39	54	36	17	6				189
	62.0	H					-	60	8	-	33	39	25	3	-		<u> </u>	122
	61.0	H		┞	$\vdash$	┞	L	$\vdash$	L		\ <u>`</u>	Ľ	-	-	L	_	$\vdash$	
	_								-	33	19	23	25	80	-			8
	0.09 0										3	10	13	8				36
	69.0				T					-	4		60	2		2		18
	58.0	H		-	$\vdash$	H	-	-	-	$\vdash$	-	-	3	$\vdash$	2	2	-	7
•	0	$\parallel$			L	L	L	L	L	L		L	Ľ	L	Ľ	Ľ	_	
	0 67																-	
	26,0	21.5		21.0	20.0	20.02	2.0	2	20.0	0,0	0	2	0.0	יים.	0.0	0.0	0.4.	TOTAL
	•	_	-			ſ	נא	IN	43	SN	1	37	33	75				

1977 ARMY WOMEN	MEAN	ST DEV	~	REGRESSION EQUATIONS	STD ERRO
STATURE	64,15	2,57	746	= (1.860)*SLEEVE INSEAM(IN)+(31.16)	1.71
SLEEVE INSERM	17,74	1.03	0.746	= (0,299)*STATURE(IN)+(-1.44)	0,69

TABLE 79

A BIVARIATE FREQUENCY TABLE FOR STATURE AND UPPER THIGH CIRC 1966 ARMY MEN

Sign   Go.   To.		_	_		_	,	,	_		_	,	-	_	-	_		_	_	_		•
STRTURE ( III		TOTAL		-	-	01	92	100	233	496	816	1262	1378	1264	748	283	69	12	1	2899	
STRTURE ( III		6	1																		l
STRTURE ( III		79.	t	H	H	-	<del> </del>	┢	-	┢╴	┢	$\vdash$	<del> -</del>	-	H	H	H	$\vdash$	H		1
Shature   Shat		_	1									i	-								l
Shature   Shat		78.	٢				T		_	-	r		$\vdash$	_		┢	-			_	١
STRTURE   IN   STRT		_	1					_			_	۵		-	-					67	l
STRTURE   IN   STRT		77.	r	Γ	Γ											Г	Г	П			١
SIMTURE IN		_	1										.,							=	
Shature   Shat		76						6	2	8	2	4	8	4	*					6	
SIMPLRETIN   SIM		0	L	L			L	L	L	L	L	L	L	L	L			Ц		60	
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0		5	ļ		-		2	4	80	91	=	0	6	6	7					7.	
FGLO   GOLO		0.4	ŀ	L	L	L	L	L	L			Ľ	L	L	_	$oxed{\bot}$	L	Н	Ц		
F9,0   60.0   61.0   62.0   63.0   64.0   66.0   67.0   68.0   69.0   70.0   71.0   72.0   73.0   30.0		7	l	l			2	-	18	24	34	42	32	30	12	4				86	
STATURE (IN)		3.0	L	┡	┞	H	L	H		H	L	L	_	L	_	_	_	Н			1
STATURE (IN)		-			2	၈	8	6	21	37	23	74	75	69	22	9				172	
STATURE (IN)		72.0	ŀ	$\vdash$	$\vdash$	Н		H	H	_	H	_		_	_	H		H	Н	(1)	
Fig. 0   60.0   61.0   62.0   64.0   66.0   66.0   69.0   70.0   71.     31.0   20.0   61.0   62.0   63.0   64.0   66.0   66.0   69.0   70.0   71.     28.0   20.			١		-	-	1	14	33	46	96	106	112	90	47	16	3			544	
31.0         STRTURE(IN)           30.0         60.0   61.0   62.0   64.0   66.0   66.0   67.0   68.0   69.0   70.0             30.0         20.0         30.0           28.0         2         2         2         3         1           28.0         1         2         2         2         3         1           29.0         1         4         4         6         12         21         36         34         3           24.0         1         2         3         6         1         4         6         12         21         36         34         3           25.0         1         4         4         6         12         21         36         34         3           24.0         2         1         4         4         6         12         21         36         34         3           25.0         3         4         9         23         30         46         36         147         147         100           21.0         3         6         16         29         46         32         123         148         40         36         12         11         4		71.	H		Н	Н	_	$\vdash$	Н	-	_	Н	-					H	$\dashv$		
31.0         60.0         61.0         62.0         63.0         64.0         66.0         67.0         69.0 <th< td=""><td>_</td><td>_</td><td></td><td></td><td></td><td></td><td>3</td><td>20</td><td>33</td><td>71</td><td>109</td><td>166</td><td>172</td><td>112</td><td>69</td><td>26</td><td>3</td><td></td><td></td><td>773</td><td></td></th<>	_	_					3	20	33	71	109	166	172	112	69	26	3			773	
31.0         60.0         61.0         62.0         63.0         64.0         66.0         67.0         69.0 <th< td=""><td>= =</td><td>5</td><td>Ī</td><td></td><td></td><td>1</td><td>3</td><td>2</td><td>•</td><td>]</td><td>1</td><td>2</td><td>3</td><td>)</td><td>3</td><td>9</td><td>3</td><td></td><td></td><td></td><td>١</td></th<>	= =	5	Ī			1	3	2	•	]	1	2	3	)	3	9	3				١
59,0   60.0   61.0   62.0   63.0   64.0   66.0   67.0   68.0   69.0   31.0   30.0	TUR						Ĭ	7.	3,	4	14.	91	181	18(	16	31	ì			93,	
59,0   60.0   61.0   62.0   63.0   64.0   66.0   67.0   68.    68.    68.0   67.0   68.    68.    68.0   67.0   68.    68.    68.0   67.0   68.    68.0   67.0   68.    68.0   67.0   68.    68.0   67.0   68.    68.0   67.0   68.    68.0   67.0   68.    68.0   67.0   68.    68.0   67.0   68.    68.0   67.0   68.    68.0   67.0   68.0	STA	69				3	2	9	5	7	4	3	3	8	2	0	9	1		3	
31.0 30.0 28.0 26.0 1		0.	L		Ц		Ц		3	1	11	20	22	21	[11	*		Ц		0.4	l
59,0   60.0   61.0   62.0   64.0   66.0   66.0   67.0   67.0   66.0   67.0   67.0   66.0   67.0   67.0   66.0   67.0							2	7	2.1	2.5	36	30	13	32	53	8	11	4	-	. 6	l
59,0   60.0   61.0   62.0   64.0   66.0   66.0     31.0   20.0   20.0   20.0   20.0   20.0     28.0   20.0   1   4   4   6   1     27.0   1   4   4   6   1     27.0   20.0   1   7   8   20   4     27.0   20.0   1   4   9   23   30   86   14     27.0   20.0   1   4   12   27   48   66   10     20.0   1   4   12   27   48   66   10     18.0   1   2   1   6   4   1     16.0   1   8   32   58   135   235   476   75     16.0   1   9   32   58   135   235   476   75     10.0   10.0   10.0   10.0   10.0     10.0   10.0   10.0     10.0   10.0   10.0		7.0	Ļ			Ц	Щ			1	Ĺ	10	[ 2 ]	5(	1:	_		Ц	4	<u>, 99</u>	l
31.0 30.0 28.0 26.0 26.0 1			ı				2	8	12	42	72	13	62	54	60	31	11	-		61	
59,0   60.0   61.0   62.0   63.0   64.0   66.0   30.0		0.9	H	_	Н	Н	H	Н	Н	Н	Н		1	1	1	Н	Н	Н	$\dashv$	7	
31.0 30.0 28.0 26.0 26.0 27.0 26.0 27.0 26.0 1 4 9 23 3 27.0		_						9	9	29	51	96	87	92	99	29	4	4		176	
31.0 30.0 28.0 26.0 26.0 27.0 26.0 27.0 26.0 1 4 9 23 3 27.0		99.	Н		Н	Н			Н	Н		-		Н	Н			$\dashv$	1		
31.0 30.0 28.0 26.0 27.0 26.0 27.0 26.0 1 4 9 23 27.0 27						1		2	4	80	23	30	45	46	48	21	9	2		235	
31.0 28.0 28.0 28.0 26.0 27.0 26.0 27.0 26.0 27.0 27.0 27.0 28.0 27.0 28.0 28.0 28.0 29.0 20.0		64.	H							_		_									
31.0 30.0 28.0 26.0 27.0 26.0 27.0 26.0 27.0											16	23	18	29	27	=	_			136	
29.0 20.0 29.0 26.0 26.0 26.0 27.0 26.0 26.0 27.0		63								1	1	9	0	9	2	7	2			80	
29.0 60.0 61.0 21.0 20.0 25.0 25.0 25.0 25.0 25.0 25.0 25		.0	Ц										1		_					2	
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1966 ARMY MEN	MEAN	ST DEV	œ	REGRESSION EQUATIONS	STO ERROR
STATURE	68.71	2.60	2.60 0.219	= (0.302)*UPPER THIGH CIRC(IN)+(62.12)	2.54
UPPER THIGH CIRC	21.82	1.89	1.89 0.219	= (0.159)*STATURE(IN)+(10.90)	1.84

TABLE 80

A BIVARIATE FREQUENCY TABLE FOR STATURE AND UPPER THIGH CIRC 1977 ARMY WOMEN

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STO ERROR 2.46 1.72 REGRESSION EQUATIONS = (0.411)\*UPPER THIGH CIRC(IN)+(54.95) = (0.200)\*STATURE(IN)+(9.57) 2.57 ST DEY MEAN 64.15 22.40 1977 ARMY WOMEN STATURE UPPER THIGH CIRC

A BIVARIATE FREQUENCY TABLE FOR STATURE AND WEIGHT 1966 ARMY MEN

6677 79.0 STATURE(IN)
[69,0 | 60.0 | 61.0 | 62.0 | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 71.0 | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | Ø --33 83 199 371 644 773 937 1042 970 750 424 236 136 28 32 Ø METGHT(LB) TOTAL

STD ERROR 2.27 20.37 (4,388) \*STATURE(IN)+(-142,39) = (0,054)\*WEIGHT(LB)+(60,12) REGRESSION EQUATIONS 11 0.489 0.489 2,60 ST DEY MEAN 68.71 159.10 1966 ARMY MEN STATURE WE 1 GHT

TABLE 82

A BIVARIATE FREQUENCY TABLE FOR STATURE AND WEIGHT 1977 ARMY WOMEN

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	1977 ARM STATURE WEIGHT
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A BIVARIATE FREQUENCY TABLE FOR UPPER THIGH CIRC AND WEIGHT 1966 ARMY MEN

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REGRESSION EQUATIONS = (0.069)\*WEIGHT(LB)+(10.84) = (10.598)\*UPPER THIGH CIRC(IN)+(-72.16) R 0.857 0.857 1.89 ST DEY MEAN 21.82 159.10 UPPER THIGH CIRC WEIGHT 1966 ARMY MEN

STD ERROR 0.97 12.03

A BIVARIATE FREQUENCY TABLE FOR UPPER THIGH CIRC AND WEIGHT 1977 ARMY WOMEN

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REGRESSION EQUATIONS = (0.084)\*WEIGHT(LB)+(11.30) = (9.243)\*UPPER THIGH CIRC(IN)+(-74.95) 0.883 0.883 1.79 18.76 ST DEV MEAN 22.40 132.11 1977 ARMY WOMEN UPPER THIGH CIRC WEIGHT

STD ERROR

0,84

## SECTION II

Paired Male and Female Bivariates:
Dimensions Not Comparable

TABLE 85

A BIVARIATE FREQUENCY TABLE FOR ANKLE CIRC AND WAIST CIRC 1966 ARMY MEN

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888
984
1137
1201
989
497
210
42
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60
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23.00 TOTAL

STD ERROR 0.49 2.77 REGRESSION EQUATIONS
= (0.089)\*\*MRIST CIRC(IN)+(6.12)
= (2.889)\*\*ANKLE CIRC(IN)+(5.80) 0.508 ST DEV 0.57 3.22 MEAN 8.93 31.61 1966 ARMY MEN ANKLE CIRC WAIST CIRC

TABLE 86

A BIVARIATE FREQUENCY TABLE FOR ANKLE CIRC AND WAIST CIRC 1977 ARMY WOMEN

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	7.50											1.		3	4 10	6 19	11 9	13 23	22 24	8 20		2	72 134
	7.25								_	_			1				9	80	8	8	60	2	37
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	6.50	42.00	100	00 07	30.00		37.00	20.96		NI NI				100		00.83	20.00	20.72	25.00	20.02	29.00	20.00	TOTAL

STD ERROR	0.46	2.48
REGRESSION EQUATIONS	= (0.068)*WAIST CIRC(IN)+(6.26)	= (2.008)*ANKLE CIRC(IN)+(11,56)
œ		
ST DEV	0.49 0.369	2.67 0.369
MEAN	8,16	27,94
1977 ARMY WOMEN	ANKLE CIRC	WAIST CIRC

TABLE 87

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND INTERSCYE(BACK) 1966 ARMY MEN

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	42.0	1	-	_	1	3	6	19	36	37	33	24	18	9	2	1			-				186	NOIL	EST (
•	41.0	$\dagger$		_	3	9	10	24	64	Н	67	69	43	91	9	2							338 1	REGRESSION EQUATIONS	11.244.#INTERSUTE(BHUNJ(IN)+(17.77)(0.277)*BUST/CHEST CIRC(IN)+(5.17)
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BUST/CHEST CIRCLIN)	39.0	1				1	8	91	99	90	138	163	127	63	38	91	4	2					712 6	RESS	277)
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	.0 34.0							1	2	9	12	34	77	96	98	67	52	27	9	3	1		478	ST	1.1
	32.0 33.0									-	3	18	21	27	37	44	33	22	8	2	1		217	MEAN	36, 32 15, 39
	31.0 32										-	2	2	7	16	8	=	7	9				63	및 H	15.
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	3					1	1-			1	<u></u>	<u> </u>						,		1.	<u></u>		-	1966 ARMY MEN	INTERSCYE (BACK)
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TABLE 88

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND INTERSCYE(BACK) 1977 ARMY WOMEN

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	45.				-							T	T		8			87)	(06
	44.0	H		_	$\vdash$	-		$\vdash$	$\vdash$	-	-	-		-				15	80
	43.0	H			L	L	L	_	L		L	L	L	_				+ N	+ (2
	42.0		2	1	1		L	L	1			L		L	9			)( [	
				2	مت	6	2		,	2	-				11	Ų	S	1.265)*[NTERSCYE(BACK)([N)+(15.87)	(0.173)*BUST/CHEST CIRC(IN)+(8.90
	41.0	H			1	2	-	4	1	-		-			11	PEGRESSION EDITONS	5	E(B	18
	40.0	H			-	9	8	8	9	2	2		L			רסוונ		SCY	CHE
=	9.0	Ц		_					}		_		L		32	2	ĺ	NE	UST,
RCC 1N	0.		1	1	3	11	20	01	01	L	2				99	010	; ;	======================================	) <b>*</b> B
ST CI	0 38				9	20	20	26	13	9		1			83	U Q	֭֭֡֝֝֝֝֝֝֝֝֓֓֓	265	173
BUST/CHEST CIRC(IN)	36.0 37.0 38.0 38.0		_	2	9	20	21	45	29	19	10	1		-	164	<u>د</u> د	֭֡֝֝֝֝֝֜֜֝֝֝֓֜֜֝֓֓֓֓֡֝֜֜֜֓֓֓֡֓֜֜֜֜֓֓֓֡֓֜֡֡֡֡֜֜֡֡֡֓֜֡֡֡֡֡֡֡֡	=======================================	0.
BUS	36.0	+		2	2	-	Н	$\dashv$				2		-			1	11	H,
	35.0	+		4		23	48	48	38	31	18	_	1		217	ά	_	0.467	0.467
	34.0			3	*	۷ -	24	38	19	47	8	4	4	-	193		-	0	o
	34	l			2	2	21	7	47	46	18	9	9		192	7	,	2.49	0.92
	33.0	1	1	1	-	2	1.4	55	38	38	28	17	8	2	178	E 55		۵.	Ö
	32.0	1	+	1	-	_	9	+	$\dashv$	-	-		و	$\dashv$				. ·	_
	31.0	+	4	4	-	_		19	22	28	18	므	4	$\dashv$	106	K F D N		4.72	4.90
	30.0						•	ω	ဖ	2	91	ع	9	4	99	*		34	ù
	0 30								-	6	၉	2			æ	2		RC	3
	27.0 28.0 29.0	Ť	1		1			1	1	၉	1		1		60	1977 ARMY WOMEN		BUST/CHEST CIRC	INTERSCYE (BACK)
	80.9	ł	$\dagger$	+	1	$\dashv$	+	+	+	+		+	$\dashv$	+		¥.	;	HEST	CYE(
	0,7		ما		100				100				1.0			<u>-</u>		2/2	ERS(
		18.0	17.5		Г	Ľ	1	Е	14.5	Г				12.0	TOTAL	197	,	BUS	INI
INTERSCYE (BACK) ( IN )																			

TABLE 89

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND NECK CIRC 1966 ARMY MEN

	TOTAL		2		6	-	22	97	862	902	1283	1467	1694	869	288	8	80	-	6681				
	48.0		_	L		2		_	-		_	L	$\vdash$	-	-	-	-	_	_	-	<b>20R</b>	"	
	48.0	-		L	-		L		L	L	-	L	L	-			L	_		-	STO ERROR	1.96	0.61
	2.0		1	L			3		9		L		L		L		L		13		STO		
	¥ 0.					-	-	m	*	-	-								=				
	45.0 46.0 47.0						2	9	4	9	4								22	]			121
							3	9	8	6	4	3	<u> </u>	T					33			_	.(7.
	44.0	L	1	_	1	1	2	8	9	12	12	9	-		-		-	-	<u> </u>	1		.21	[N]
	43.0							Н	56	-	$\vdash$	L	$\vdash$	L	L	L	H		7.0	-		+(5	RC (
	42.0				L	Ц	3	16	35	40	23	14			L	L			129		SNO	2 N	じ
	4 0.				2	2	1	20	38	09	38	52	ß	၉					186		ATIC	IRC(	HES1
æ	40.0 41.0						3	13	46	104	98	91	24	မ	-				338		EQU	X C	3/10
BUST/CHEST CIRC(IN	0 40.						1	12	64	123	169	106	64	7	3				819		REGRESSION EQUATIONS	(2.154)*NECK CIRC(IN)+(5.21	(0.206)*BUST/CHEST CIRC(IN)+(7.12
HEST	37.0 38.0 39.0						2	ક	32	126	233	181	96	36	1	1			212	1	RESS	154)	206)
3UST/C	38.0		1					9	27	109		248 1	218	89	1						REGI	(2)	0
	37.0		+	-		Н	-	$\dashv$	$\dashv$		3 242			Н	3	_	2	Н	118		•	11	11
	36.0		4	4		4	_	-	2	73	223	294	316	103	26				1062	-	2	0,666	0.666
	35.0		4				_		7	36	166	276	403	176	42	8			1111	ļ		ó	<u>.</u>
	0									16	67	180	268	192	67	12	3		286		DEV		.81
	0 34.		ł								22	63	141	176	99	11	-		478		ST D	તં	0
	33.0	1								-	2	14	68	77	54	10		-	217		z	91	. 72
	32.0	1	7		1			1	1	1	_	3	6	21	19	B	2				MEAN	36.91	14.
	31.0	1	1	-	1	1	1	-	$\dashv$	1	4	1	_	9	7	2	-	1	91			ပ	
	29.0 30.0		1	-	+	4	-	-	-	-	4	4	-	+	-	-	-	4			EN	CIRC	
	0.6	+	$\downarrow$	4	4	4	_	4	4	4	4	4	4	4	4		4	4			¥		ည
	28.0												ل	ل					<b>,</b>		Æ	H3/	2
-	2	19.6	19.0	18.5	18.0	17.6	12.0	16.6	18.0	15.5	15.0		Ŀ	Ь.	3 6	10 2	100	1	TOTAL		1966 ARMY MEN	<b>BUST/CHEST</b>	NECK CIRC
					_		ſ	NI	้าอ	181	2	ж	1E	•								_	_

TABLE 90

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND NECK CIRC 1977 ARMY WOMEN

BUST/CHEST LINCING 10 0 143 0 143 0 146 0 146 0 146 0 146 0 147 0 1 101RL		~	12	611	192	462	317	125	12	1		1330		STD ERROR 2.06 0.51
0 47			-									-	,	STD 2
146.		-												
46.	T		-	-	1						T	8		16
44.0		$\vdash$	$\dagger$	$\dagger$	T	$\dagger$	$\dagger$	T		$\dagger$				) +(7.
0 43 0		-	+	•	\ \ -	+	+	-	+	+	1	10		REGRESSION EQUATIONS (2.275)*NECK CIRC(IN)+(5.74) (0.139)*BUST/CHEST CIRC(IN)+(7.91)
6.9	1		1,	,	,	•	1				1	11		IS IN)+( CIR(
		-	- (	, (	7	1	,  -	1	†	1	1	-		ATTON IRC() HEST
,	-	1	-	,	٥	2	1	1	†	1	1	32	┪.	REGRESSION EQUATIONS (2.275)*NECK CIRC(IN (0.139)*BUST/CHEST C
1 1 1 1	38.	1	-	-	91	23	22	2	1	1		, y	3	NON NENE
SI CIR	38		2	-	12	98	32	=	1			03	2	3RES: 275 139
STACHE	0 37.			-	22	38	8	31	2			73.	\$01	RE(2)
8	36.			2	34	53	83	37	7	-1		::3	712	က္ကက္
	36.1			S	8	27	08	28	17			1	183	R 0.563 0.563
	34.				2	24	36	62	25	-			192	2.49 0.62
	33 (			-	2	22	19	24	32	2		T	179	ST [
	20			T	-	2	32	38	22	٥			106	MEAN 34.72 12.74
	16			T	T	-	5	9		-		1	99	MEAN 34.72 12.74
	300	27.0   28.0   28.0   30.0   31.0   32.2		1	1	†	T	ľ	,	+	1	1	6	RC
		7.82 1.82		$\dagger$	$\dagger$	$\dagger$	†	†-	-	+	T		m	103
		1 28.0	+	$\dagger$	+	†	†	+	†	1	†	†	,,,	RRMY CHES
		27.0	16.0	14.6	1.0	13.6	13.0	12.6	12.0	11.6	11:0	10.6	TOTAL	1977 ARMY WOMEN BUST/CHEST CIRC NFCK CIRC
	•				( N	23	วย	13	X	EC	N	٠		

TABLE 91

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND VTC 1966 ARMY MEN

Section   Sect
80ST/CHEST CIRCIN)  56.0   36.0   37.0   38.0   40.0   41.0   42.0   43.0   44.0   46.0   47.0    1
86.0   36.0   37.0   38.0   40.0   41.0   42.0   43.0   44.0   46.0   46.0   47.0   47.0   47.0   48
86.0   36.0   37.0   38.0   40.0   41.0   42.0   43.0   44.0   46.0    36.0   36.0   37.0   38.0   39.0   40.0   41.0   42.0   43.0   44.0   46.0    1
8UST/CHEST CIRC(IN)  36.0   36.0   37.0   38.0   40.0   41.0   42.0   43.0   44.0    1
86.0   36.0   37.0   38.0   39.0   40.0   41.0   42.0   43
BUST/CHEST CIRC(IN)  36.0   36.0   37.0   38.0   39.0   40.0   41.0   42.0    1
80\(ST/CHEST CIRC(IN)\) 36.0   36.0   37.0   38.0   39.0   40.0   41.0    1
86.0   36.0   37.0   38.0   39.0   40.0   36.0   37.0   38.0   39.0   40.0   38.0   39.0   40.0   38.0   39.0   40.0   38.0   39.0   40.0   39.0   40.0   39.0   40.0   39
36.0   36.0   37.0   37.0   37.0   37.0   37.0   37.0   37.0   36.0   37.0   37.0   36.0   37.0   36
36.0   36.0   37.0   37.0   37.0   37.0   37.0   37.0   37.0   36.0   37.0   37.0   36.0   37.0   36
36.0   36.0   37.0   37.0   37.0   37.0   37.0   37.0   37.0   36.0   37.0   37.0   36.0   37.0   36
36.0   36
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
- 【の】 】 【 】 】 】 】 <del>                         </del>
34.0 1006 1100
33.0 3 1 1 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
25.0 3 26.0 3 27.0 3 28.2 2 29.2 2 20.0 3 20.0 3
31.0 3 1.0 3 3 1.0 63 1 1 8 6 6 1 1 8 6 6 8 1 1 1 8 6 8 1 1 1 1
30.0 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
59.0
9
VICIUM 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6

0.604

64.61

STO ERROR

2,10

(0.767)\*BUST/CHEST CIRC(IN)+(36.29)

TABLE 92

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND VTC 1977 ARMY WOMEN

B		0 43.0 44.0 45.0 46.0 47.0 TOTAL		2     2	9	1 1 1 19	91	38	1   67	201 102	191	841 1 1	691	184	991	211	19	17	<b>*1</b>	11	9	2	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STD ERROR	<b>40</b>
BUST  -0   28.0   29.0   30.0   31.0   32.0   34.0   36.0		Н			2	_	1		2 1	3	2 1	1	1										$\dashv$	IONS	(1.96)
BUST  -0   28.0   29.0   30.0   31.0   32.0   34.0   36.0		$\vdash$			2	-	2		Ц	*		+	*	1	1	i	_						-	EQUAT	+(N)
BUST  -0   28.0   29.0   30.0   31.0   32.0   34.0   36.0	RC(IN)	-				2	7	*	9	8	8	91	o	9	1	1							99	SION	)*VTC
BUST  -0   28.0   29.0   30.0   31.0   32.0   34.0   36.0	HEST CI			1			*	9	18	12	17	11	10	11	7		1	1					83	EGRES	0.541
10 128.0   29.0   30.0   31.0   32.0   33.0   34.0   36.0	BUST/C	Г٦	_			-	2	H	Н	Н	Н		H	Н	Н			1						<u>oz</u>	11
20   28.0   29.0   30.0   31.0   32.0   33.0   34.0		-					2 1	-	L	Н	H		$\vdash$		$\perp$		4 3	2 4	1					<b>~</b>	818
10 126.0 129.0 130.0 131.0 132.0 133.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132.0 133.0 132		+-1		_		-		3	3	H	Н	_		H	$\vdash$	_	9	*	2					>	
1 1 1 6 2 105 106 106 106 106 106 106 106 106 106 106		[3]	-			-		1	3	2	10	_	-	L	H		22	8	2	3	1				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		.0 32						1	-	2	3	3	11	91	1.7	56	8	12	2	2	2		$\neg$	N.	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1												3	2	9	10	8	9	7	9	3	1	2	99	: <b>X</b>	34
[-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\		9												2	1	1		1	-	2			<b>6</b>	MEN	TRC
[-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\		Н					Ц										-			1	1		6	MY WC	181
		2	T.					1.					1		1	\ \ \ \	-						TOTAL 1	1977 AR	RIIST/CHF

TABLE 93

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WAIST BACK 1966 ARMY MEN

	TOTAL		-	10	11	35	96	182	307	646	838	194	874	944	804	634	373	181	62	32	4	6682	
	0.61	- 		-				-	2	1						_		_	-			*	
	0.48.0	-	1			1	-			3	1	1	1	2	1	1						13	
	0 47.0	-			-				1	3	1	- 2	2		1	_					L	111	
	0.94 0.							2	2	1	2	2	4	3	2	9	1					22	
	0.04 0.					1	2	2	7	9	4	9		1	£	1	1					33	
	3			1	1	2	£	8	01	8	9	7	9	8	9	2	3					70	
	.0 43.0			1		1	*	8	11	61	8	13	91	12	61	9	9		1			130	
	.0 42.0			1	2		8	7	8	11	0+	22	21	26	91	11	9	2		1		186	
[N]	40.0 41				1	9	13	91	82	34	46	46	46	42	26	26	8	9	1	1		338	
BUST/CHEST CIRCLIN	3.0 40				1	3	8	27	30	20	92	23	72	71	9	36	26	*	+	2		616	
I / CHES	38.0 38.0	H				3	16	22	44	19	106	94	97	108	99	89	16	01	9	1		712	
BUS	37.0 3	H		1	3	1	16	36	41	83	124	116	126	101	124	72	43	22	1	1		116	
	36.0 3	L		1	1	8	11	13	99	83	138	122	140	144	132	83	29	56	12	*	3	1062	
	36.0 3			1		*	9	22	31	85	144	130	134	167	163	119	99	43	9	*		1111	
ļ	34.0 3				1	1	*	9	26	47	77	98	126	130	96	96	99	23	8	9		796	
	33.0					1	9	7	8	34	38	42	99	78	16	69	36	22	13	7		478	
	32.0						1			8	18	21	24	31	32	31	22	18	7	*	1	217	
	31.0							1	_	3	3	*	7	8	13	8	8	8	3	1		63	
	30.0										1	2	-	*	-	1		*		1		16	
	29.0		_									4	$\dashv$	4		-			$\sqcup$		$\mathbb{H}$	1	
i	9.0			-	) u	]	ار	2 0			2 4		اد		2 0		, [		2 14	)  -	2 14	- E	
٠		93.0	200	2000	2 6		200		100		_	136	┷-	┸.	2 2 6	_	2 2	100	1 2	1	1	TOTAL	

STO ERROR

2.55

= (0,126)\*BUST/CHEST CIRC(IN)+(13,08)

0.245

ST DEV 2.63 1.35

MEAN 36.92 17.73

1966 ARMY MEN BUST/CHEST CIRC WAIST BACK

REGRESSION EQUATIONS = (0.475)\*WAIST BACK

(IN)+(28,49)

TABLE 94

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WAIST BACK 1977 ARMY WOMEN

Strong   S		TOTAL		-	3	4	14	31	71	108	213	245	239	201	127	52	18	æ		1330	ROR	Ģ	ന
80157CHEST CIRC(IN)  80157CHES										1										-	STO ER	2.4	1.0
ST. O   28.0   39.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0   38.0   40.0   41.0   42.0   43.0   44.0     20.0   10.0   20.0   31.0   32.0   34.0   36.0   36.0   36.0   38.0   40.0   41.0   42.0   43.0     10.0   1		0 46.									1									-	0,		
8UST/CHEST CIRC(IN)  8UST/CHES		0 45.									1									2		(2)	.86)
8UST/CHEST CIRC(IN)  8UST/CHES																						28.8	+(13
8UST/CHEST CIRC(IN)  8UST/CHES					-	2	1			1	1								,	2		) + ( N	(NI)
8UST/CHEST CIRC(IN)  8UST/CHES					-			1		2	3	2	2	1						=	် <u>လ</u>		CIRC
8057  805		_							1		3	2	3	1	1					=	IT I DIN	RCK	ESI
8057  805	٠.,	_						4	3	4	4	6	-	2	-	_				32	EGUP	STE	17/CF
8057  805	C( IN)	0 39.					-	3	2	9	o	13	11	10	9	4				99	NOIS	I KMX	¥BU€
8057  805	ST CIR	0 38.						2	8	~	=	16	20	81	2	4				93	3RESS	367	064
20.5 20.6 19.6 18.6 16.0 10.0	JST/CHE	.0 37.			-		-	2	:1	13	28	25	92	25	=	8	-			164	RE(		_
20.5 20.6 19.6 18.6 16.0 14.6 19.0 14.6 19.0 14.0 19.0	86	_		1	2		4	9	8	15	0.4	38	94	23	22	2	2			217			
20.5 20.6 20.0 19.6 18.6 16.0 16.0 16.0 17.6 18.6 18.6 18.6 18.6 18.0		_					4	*	7	16	38	36	36	23	20	4	4			193	œ	0.1	0.1
20.5 20.6 19.6 19.6 10.0							-	2	æ	18	26	**	38	59	91	8	2			182	DEV	4.9	.04
20.5 20.6 19.6 18.6 18.6 16.0 16.0 16.0 16.0 16.0 16.0 16.0 16		.0 33				_		م	Ξ	Ξ	58	32	24	36	61	2		_		179			***
20.6 20.6 19.6 19.6 17.6 17.6 16.0 16.0 16.0 16.0 16.0 16.0 16.0 16		_		L			2	2	စ	9	91	12	20	91	8	9	4			105	A.	. 72	. 08
20.5 20.6 19.6 19.0 18.6 18.6 16.0 16.0 16.0 16.0 16.0 16.0 16.0 16		М		L	L	L		-	-	4	9	2	12	2	80	2	-	-		99	Σ	e	Α.
20.5 119.6 118.6 1	437	⊢			Ŀ				-	_	-	_		-	6	2				<b>.</b>	MEN	: IRC	
20.5 119.6 118.6 1		_	-										L		2	-	L	_		9	¥ X	LS	JCK
MARIST BACK (1N) 1971 111-10-10-10-10-10-10-10-10-10-10-10-10-		_	-	Ļ	Ļ	Ļ	Ļ	Ļ	Ļ	ļ	Ļ		Ļ	_		Ļ	Ļ		Ļ			H3/	3T B
	:		00	50.0	20.0	19.5		_	1	_	_	_			_			13.0	13.6	TOTAL	197	BUS	MA I

TABLE 95

A BIVARIATE FREQUENCY TABLE FOR BUSI/CHEST CIRC AND WAIST CIRC 1966 ARMY MEN

	TOTAL	-			2	3	2	8	16	20	34	94	112	92	160	192	294	386	486	679	808	986	946	969	446	141	43	٢	2	1899	
	49.0	_				L				L		L	L	L	L	L		L		L	L		L	L	L	L	L	L	L		
	П	-	l						-		-																			+	
	48.0	T	T		2		_	2	9	_	1	1						T												13	
	47.0	H	-	$\vdash$	-	-	H		-		_	_	$\vdash$	$\vdash$	L		H	-	┞	-	$\vdash$	Н	H	-	_	H	$\vdash$	L	-		
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STO ERROR

REGRESSION EQUATIONS
= (0.665)#WAIST CIRC(IN)+(15.89)
= (0.996)#BUST/CHEST CIRC(IN)+(-5.16)

R 0.814 0.814

2.63

MEAN 36.91 31.61

1966 ARMY MEN BUST/CHEST CIRC WAIST CIRC

ST DEY

TABLE 96

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WAIST CIRC 1977 ARMY WOMEN

	TOTAL	9	2			3	7	6	20	20	30	99	106	136	181	213	220	179	88	32	8		1330	÷	ERROR	. 52	63
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	0.04						-	-	9	9	۵	2	6	9	2	-			-				35		REGRESSION EQUATIONS	0,740)*WRIST CIRC(IN)+(14.04	0,849)*BUST/CHEST CIRC(IN)+(-1
C( IN)	0 39.0					-			9	80	<b>®</b>	12	==	7.	3	-							65		10N	I WWW	*BUS
ST CIR	0 38.0						~		6	2	9	*1	18	81	18	O)	2						83		3RES	740	849
BUST/CHEST CIRCLIN	0 37.0	Ī	T					2			4	13	26	36	9	21	80	م					164		RE	0) =	0) =
8	0 36.0		Ī						-	2	7	33	27	36	99	4.2	31	=					213			i	
	.0 35.0										-	2	92	1.4	36	99	48	20	,				193		<u>~</u>	0.793	0.793
	.0 34.0											-	-	2	18	36	99	53	9	-			182		DEV	49	•
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	.0 32.					L								2	6	13	٩	3	2	-	_		106		MEAN	1, 72	7.94
	30.0 31						L		L	L	L				6	-	•	12	2 2	13	9		99		E	3.	20
	29.0 3							-	_			-		_	-	1	igg	-	<u> </u> -	9			<b>o</b>		OMEN	CIRC	) ;
	28.0 2		-	-		_		+			ļ	ļ	1	-	_	-		-	1	<u> </u>	-		<b>е</b>		ARMY WOMEN	FST	MAIST CIRC
	27.0 2							_	<u> </u>		<u> </u>							<u> </u>								T/CH	7
		42.0	41.0	40.0	38.0	38.0	37.0			35.0	-	_	_	၀. ၉ 81		28.0	27.0	26.0	26.0	24.0	23.0	22.0	TOTAL		1977	BIIS	ם מ
										•	_	_		-	- *				٠,								

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND VTC 1966 ARMY MEN

368 510 794 580 СКОТСИ | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 34.0 | 35.0 | 35.0 | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 Ø ທ TOTAL 76.0 74.0 73.0 72.0 71.0 69.0 64.0 63.0 62.0 61.0 60.0 69.0 59.0

STD ERRI	1.78	3.23
REGRESSION EQUATIONS	= (0.142)*VTC(IN)+(23.87)	= (0.468)*CROTCH HEIGHT(IN)+(49.14)
œ	0.258	0.258
ST DEV	1.84	3.34
MEAN	33,05	64.61

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND VIC 1977 ARMY WOMEN

																	-						
	O TOTAL	1		2	5	16	91	38	63	107	161	173	169	194	165	112	51	41	14	11	S	2	1330
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	0 36.0						-1				1		1										3
. •	.0 36.0							1	3	2	9	2	4		1								18
	.0 34.0					1	1	3	9	7	8	4	3	9	1								39
2	.0 33.0	-			1	2	3	10	10	18	18	17	11	18	6	9	4						128
1041	30.0 31.0 32.0					3	*	10	91	19	23	30	26	22	14	13	3	9	1				081
CROTCH HEIGHT(IN)	.0 31			1	4	•	*	4	81	24	31	40	36	45	28	19	10	*	2		1	1	279
580	29.0 30			1		1	2	9	*	21	40	43	91	9+	40	38	٤	10	3		2		308
	28.0 29					3	1	1	8	16	16	20	32	37	38	91	11	10	9	*		1	218
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	o,							Ļ		Ļ		Ļ					-						. 1
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														•									

STO ERROR 1.61 REGRESSION EQUATIONS = (0.216)\*VTC(IN)+(16.98) = (0.587)\*CROTCH HEIGHT(IN)+(42.91) 0.356 ST DEV 1.72 2.84 MEAN 30.07 60.56 1977 ARMY WOMEN CROTCH HEIGHT VTC

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND WAIST CIRC 1966 ARMY MEN

485 679 908 Ø 38.0 26.0 27.0 28.0 28.0 30.0 31.0 32.0 33.0 34.0 35.0 36.0 37.0 58 98 CROTCH HEIGHT(IN) ທ WAIST CIRC(IN) TOTAL 33.0

STO ERROR	1.84	
REGRESSION EQUATIONS	= (0.002)*WAIST CIRC(IN)+(32,98)	= (0.005)*CROTCH HEIGHT(IN)+(31.45)
<b>œ</b>	0.003	0.003
ST DEV	1.84	3.22
MEAN	33.05	31.61
1966 ARMY MEN	CROTCH HEIGHT	WAIST CIRC

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND WAIST CIRC 1977 ARMY WOMEN

																						(1)	1917
	TOTAL		3	2			3	7	67	20	20	30	55	105	135	191	213	220	179	96	35	89	1330
٠	0 37.0													1							,		p-4
	0 36.0													1			2						60
	0.38.0								2		1		1		3	4	2	3	1	1			18
	.0 34.0											2	2	3	9	2	10	3	4	2			39
N)	0 33.0							1	2	8	2	9	~	11	61	22	18	24	10	2	1		128
CROTCH HEIGHT(IN)	31.0 32.0							1		*	3	2	~	15	24	38	18	33	23	14	2		190
этсн не	30.0 31		_	1			3	*	3	o	2	8	6	20	56	38	48	77	33	20	2	1	279
CR	29.0 3			1						8	*	9	17	88	53	41	51	09	35	26	80	3	308
	28.0 2	H						1	-		9	S	9	13	13	23	34	33	37	18	o	*	218
	27.0   2				L					-	-	_	3	2	8	10	23	14	22	10	9	_	104
	26.0 2				_		_		-	-	-	_	3	_	8	2	S	4	σι	-	-	_	34
	25.0									-	L	_	_	2		2	1	1		_			2
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STD ERROR 1.71 2.64

> (0.093)\*WAIST CIRC(IN)+(27.47) (0.224)\*CROTCH HEIGHT(IN)+(21.21)

> > 1.72 2.67

30.07 27.94

ST DEV

MEAN

1977 ARMY WOMEN CROTCH HEIGHT WAIST CIRC

REGRESSION EQUATIONS

TABLE 101

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND WAIST HT 1966 ARMY MEN

	TOTAL		4	11	20	104	272	288	106	1263	1200	1094	625	329	147	58	24	3	-	2000
	0 40.0		2	3	1										1				•	٩
	0 39.0		2	3	g	*	1	1											•	
	0 38.0	H		3	18	36	22	12	3										-	*
	.0 37.0			2	14	36	08	116	38	٤.	1									220
	.0 36.0				8	17	98	227	174	82	17	7	1							808
£	34.0 35.0				2	8	41	193	328	316	85	36	1	1						020
IOHT	33.0   34				1	1	18	7.1	248	474	386	164	24	*						1381
CROTCH HEIGHT(IN	32.0 33					1	3	17	88	313	473	383	145	31						1491
CRC	31.0   32							2	12	20	192	348	246	83	12	1			3	200
	30.0   31						1	1	3	19	88	132	191	123	28	16	3		-	242
	29.0 3								3	2	01	18	31	99	**	22	3	1	-	281
	28.0 2	H									2	9	13	14	20	10	10	2	-	2
	<u>-</u>												2	2	3	8	9	1	-	22
	26.0 27												-				2	1	•	٩
	25.0   2					J	J		<u></u>	J	1	<u></u>		<u></u>					, ·	-
	2	20.0	9	2 8	7	46	2 2		2 2	1H		81	┸-	9 6		36.0	30.0	3 6		10 H

STO ERROR	1.02	1.17
REGRESSION EQUATIONS	= (0.724)  **MAIST HT(IN)+(2.74)	= (0.956)*CROTCH HEIGHT(IN)+(10.27)
<b>~</b>	0.832	0.832
ST DEV	1.84	2.11
MEAN	33.05	41.86
1966 ARMY MEN	CROTCH HEIGHT	MRIST HT

TABLE 102

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND WAIST HT 1977 ARMY WOMEN

	٠.																.,.
	TOTAL	2		11	27	90	97	166	263	266	204	140	99	20	80	2	1330
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	35.0	-		S	9	*	1	1									18
	34.0			3	10	18	3										38
	33.0		-		10	23	43	62	14	*							128
CROTCH HEIGHT(IN)	1 32.0	-				11	37	76	52	13	2						190
H 1510	29.0 30.0 31.0	+	-		<u></u>		ø	53	114	75	21	4	_				279
CROTC	30.0		-	-	-			80	70	123	16	23	80	_	-		308
		$\parallel$		_	-		-		12	47 1	26	99	60	4			218 3
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	26												-	2	ო	_	~،
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		48.0	4.7	0.0	45.0	44.0	2	0.2		0.0	200	20.00	3.00	30.0	30.0	34.0	TOTAL
						1	N.	11,	H	16	316	M					

STD ERROR	0.81	0.97
REGRESSION EQUATIONS	= (0.742)*WAIST HT(IN)+(0.45)	= (1.048)*CROTCH HEIGHT(IN)+(8.41)
œ	0.882	0.882
ST DEV	1.72	2,05
ST DE	30.07 1.72	39.92 2.05

TABLE 103

A BIVARIATE FREQUENCY TABLE FOR HIP CIRC AND WAIST CIRC 1966 ARMY MEN

-			2	3	2	•	15	20	36	54	71	36	160	261	762	386	495	673	308	386	345	695	446	141	43	٤	2	6681
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									1	4	3	8	36	46	88	103	116	83	43	22	7	1						571
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STO ERROR	1.27	1.67
REGRESSION EQUATIONS	2.46 0.856 = (0.654)*WAIST CIRC(IN)+(16.42)	3.22 0.856 = (1.120)*HIP CIRC(IN)+(-9.93)
œ	0.856	0.856
MERN ST DEV	2.46	3.22
MEAN	37.09	31.61
1966 ARMY MEN	HIP CIRC	WAIST CIRC

TABLE 104

A BIVARIATE FREQUENCY TABLE FOR HIP CIRC AND WAIST CIRC 1977 ARMY WOMEN

	TOTAL	-	3	2			3	7	o	20	20	30	SS	105	135	181	213	220	179	88	35	80	1330
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CMI	0.43.0			-				-		2	S	3	2	3	7	2	2						28
HIP CIRCLIN)	41.0 42.0	ŀ	_	l		-	H	_	-	s	+	3	3	7	or or	9	-	3		_	-	-	46
H	41.0			L	_	L	L	_	L		-	_		_	L			<u> </u>			H		
	40.0	L	L	L		L	L		4	2	3		17	17	91	13	12	9	1			L	101
	Н										S	S	11	22	22	32	33	23	2	2			157
	0 39.0						-			2	-	oı	10	27	29	42	35	26	6	2			193
	38.0	ŀ		l						-	-	E.	s	91	32	88	21	38	22	12	1		241
	37.0	ŀ	$\vdash$	-	-	$\vdash$	L	H	-	-	_	_	5	6	H	H	H	Н	Н	8	3		7
	36.0	ŀ	L	L	_	L		L	L	-	L	L	Ĺ	_	12	72	35	19	38	_	L	L	195
	35.0	L	L	L	L	L	L	L	L	L			L	2	•	80	31	36	62	18	٤ ا	L	170
													-		-	s	ß	11	56	23	S	60	84
	34.0														Γ		S	8	12	17	10	3	55
	33.0	-	-	H				H		H					ŀ	-	_	3	9	01	*	1	25
	32.0	۲	H	H	L	_	H	H	H	-	-				H					1	-		
	31.0	L	L	L		L	L	L	L	L	L	L			L	L	L	2	1	1	L	1	9
	30,0			L	L		L		L	L							L	L		1	_	Ļ	2
	30	•	2	2::0	0.0		32.0	37.0	20.0	2	2.0	35.0	22.5		30.0	20.00	2 6	2000	20.00	3 6	23.0	20.56	TOTAL
	•	_		-4-					-	N			_	_	:16		_		-4-				

STD ERROR 1.77 REGRESSION EQUATIONS
= (0.650)\*WRIST CIRC(IN)+(19.43)
= (0.754)\*HIP CIRC(IN)+(-0.40) 0.700 2.48 ST DEV MEAN 37.59 27.94 1977 ARMY WOMEN HIP CIRC WAIST CIRC

TABLE 105

A BIVARIATE FREQUENCY TABLE FOR STATURE AND INTERSCYE(BACK)
1966 ARMY MEN

	TOTAL		3	a	*1	34	69	166	369	648	908	1063	1163	876	889	432	260	117	34	92	s	2	6682	ERROR
	79.0			-	L	-	_	-	L	_	L	L	L	$\vdash$	_	-		L		_		-		ER
	78.0	H		L		L		L	L	L					L	_	L	L			L		_	STD
	77.0					L	L	L		2	8	2	_		L	L		L	L		L		۵	
	76.0 7							2	_	6		2	_				2						11	
	_								•	۲	<b>.</b>	~	۵	4	2		-						86	-
	0 76.0						2	4	6	9	1.7	61	15	9	9	_			2	1			87	
	3 74.0			1	-	3	2	10	18	22	36	30	28	20	91	æ	1		_				881	လွ
	73.0	H		1	2	2	*	18	38	38	36	74	84	46	37	01	8	2	2		1		372	110N
	72.0			2	1	2	8	16	46	92	20	88	88	67	32	56	91	9	_	1			544 3	REGRESSION EQUATIONS
	71.0		1	1	3	*	1	22	19	٠١ اد	_	156	-	87	84	38	91	91	1					ON E
E(IN)	70.0	1	-	2	2	8	7	24 2	60 E	77 7	1 117	Н	1   124		H	63 3	36 1	16 1	1	1			7 773	ESSI
STATURECIN	69.0	1		_	2	9	8	Н	-	-	181	991   9	191   1	1113	0 87	H		1 8	3	9			3 937	REGR
•	68.0	1	_					18	49	181	126	176	164	181	130	99	52	L			_		1043	-
•	67.0	1	_	_		7	7.	26	9	68	68	140	189	116	114	74	20	20	2		-	_	970	~
	66.0		4	_		2	9	12	23	24	26	114	164	115	13	65	30	15	9	*	9		194	,
	Ы	1			2	-	9	8	1.4	23	48	99	93	98	83	38	21	12	2	9			476	DEV
	64.0 65.					-	2	2	٥	æ	21	37	48	92	30	22	16	8	3	-		-	235	ST
	_							ဗ	*	a	12	12	24	26	17	a	ဖ	ß	+			-	135	Z.
	.0 63.0								2		4	S	7	13	13	9	۵	2	1				28	MEAN
	0 62.0									-	-	*	9	-	2	9	-	9	-				32	_
	0 61.0	1		1	1					-		-	-		2	2		2				1	æ	MEN
	0   60.0	+		1	1			-			7			1						1	1	1		ARMY
	69,0	20.6	20.0	10	0.01	18.5	180	٠.	_	_	۰.	_	_	_		114		12.6	100	11.0	0.	10.6	TOTAL	1966 AR

2.55

TABLE 106

A BIVARIATE FREQUENCY TABLE FOR STATURE AND INTERSCYE(BACK)
1977 ARMY WOMEN

	TOTAL	4	13	30	103	180	270	264	245	128	20	24	7	1330
	73.0			_		,							_	
i	72.0	-	╀											
	71.0			2	2				1	1				9
	70.07		-	2	3	7	1							==
	69.0 70		-	2	9	9	4	Þ	7	1	1			23
	Н	6	,	ဃ	တ	13	8	8	*	E	1	1		20
	0 88.0	6	2		6	17	18	24	14	2		1		90
	0 67.0			,	12	*1	27	20	20	01	7	1		116
( N.)	65.0 66.0	1-		6	2	28	48	43	36	11	9	1	1	193
SINICKE IN		-	. 2	-	18	34	45	32	33	1.3	3	₩.	. 1	181
,	0 64.		-	9	91	21	84	45	29.	18	9	*	2	184
	62.0 63.0 64.0		-	-	12	36	36	38	32	18	12	3	1-1	189
	0 62.		F	8	2	2	22	26	26	61	B	9		122
	0.19 0		T		2	11	8	11	26	71	4	•		80
	0.09 (					2	*	9	12	9	၉	-		36
	59.0						-	6	8	9	-		1	18
	58.0	+	$\dagger$		_		-	4		-	-	_		7
	67.0	╫	-	ig	-	_		_	_	_	-		-	1
	96.0	18.0	17.6				0 0			] ; ;			0.00	TOTAL
	•	E		N?	<u> </u>	בע		1		יו־	31		- -	1 2

STATURE

TABLE 107

## A BIVARIATE FREQUENCY TABLE FOR STATURE AND NECK CIRC 1966 ARMY MEN

	TOTAL		2		9	2	22	97	298	206	1283	1457	1594	828	288	26	80		6681
	79.0										L	<u> </u>		_					-
	78.0	L	_	L		L	_	_		2	<u> </u>	9	_	L					•
	77.0			L	-			-	4	8	2		_		_		_		11
	1 76.0	Н				_	-	_	~	2	11	4	2	9		-			38
	74.0 75.0				1		2	9	12	18	18	=	16	4	-	-	-		87
					1			8	15	37	20	43	30	13	-				188
	0 73.0					2	*	8	28	23	84	88	62	27	9	၉			371
	71.0 72.0						2	*	35	79	126	114	123	99	4	2			544
2	70.0 71							91	91	106	148	189	167	19	12	2			773
STATURE( IN	69.0 70					1	1	16	20	103	200	202	216	110	30	3	1		837
ST	68.0 6					2	<b>7</b>	14	36	88	182	227	264	148	19	2	2		1043
	67.0 6		-					10	28	86	177	122	237	144	19	13	2		970
	66.0 6						3	80	*1	99	136	991	503	111	40	8			194
	65.0		_	_	_		2	ဗ	16	31	73	80	136	81	30	10			476
	64.0			4	_		-		g	61	29	45	69	4:	61	2		-	236
	63.0		1					-	2	_	24	30	33	21	8 13	3	-		135
	62.0		-	$\dashv$				-		_	3	7 8	7 13	9 18	8	3			32 68
	0.19		1					_	-	1		2	3	_	1		_	-	3
	60.0	$\frac{1}{1}$		+					_					-			_		
	69,0	19.61	0.61	18.5	0	12		  u  u	100	9	8 0	2 2		7 2		- 2 c		2 2	OTAL
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SID ERROR 2.53 REGRESSION EQUATIONS = (0.760)\*NECK CIRC(IN)+(57.52) = (0.074)\*STATURE(IN)+(9.64) 0.238 2.60 ST DEV MEAN 68.71 14.72 1966 ARMY MEN STATURE NECK CIRC

TABLE 108

A BIVARIATE FREQUENCY TABLE FOR STATURE AND NECK CIRC 1977 ARMY WOMEN

	TOTAL		7	22	118	192	462	317	126	21	p+40		1330	STD ERROR 2.40 0.58
	72.0 73.0	1						1				-	-	S
	72.0				_							$\vdash$	9	5.12
	71.0				2	2	2				_	L		+(4)
	70.07		2		ما	1	2		1		Ŀ			NS (NI) (NI)
	_			1	9	8	8	Ť					22	RCC
	69.0	1	<b>,</b>	က	12	7.	12	7	-				20	EQUP K CI TURE
	68.0			2	21	12	29	13	60	-	$\mid$		8	REGRESSION EQUATIONS (1.494)*NECK CIRC(IN)+(45.12) (0.086)*STATURE(IN)+(7.22)
	67.0			9	8	$\vdash$	$\vdash$	_	3	L	_	$\vdash$	$\dashv$	ESS1 94)# 86)#
	99.0					23	9	20				ŀ	116	EGR 1.4
ECIN)	0.9	L	1	~	2	8	7	38	~	_			183	2 - 1
STRTURE(IN)	0 66		İ		19	34	69	63	18	-			181	R .359 .359
•	62.0 63.0 64.0 66.0 66.0			-	6	32	98	45	16	6			194	0.9 R
	63.	ŀ		61.	2	32	90	52	26	9	-		189	DEV 2.57 0.62
	62.0	ŀ	┝	-	. 6		   	- C	+	-		t	122 1	<b> </b>
	61.0	-	H	+	+	ļ°	╁	╁	╁	╀	$ar{1}$	+		ν ====
	0.0	1	_	Ļ	4	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	23	3	=	-	-	-	98	MERN 64.15 12.74
	0.0				-		۷	=	e e	("	1	ļ	36	<b>X</b> 0
	89 0					6		ď	ماد				81	MOMEN
	1 68	1				-		·	Ī	-	·	Ī	~	<u> </u>
	56.0   57.0   58.0   59.0   60.0	-	T	$\dagger$	$\dagger$	$\dagger$	T	-	+	T	$\dagger$	†		RE CIRC
	56.0		19.0	14.6		<b>∃</b> 13.6 ⊢	13.0	口 12.6 一		11.6	11.0	10.6	TOTAL	1977 ARMY STATURE NECK CIRC

TABLE 109

A BIVARIATE FREQUENCY TABLE FOR STATURE AND VTC 1966 ARMY MEN

	E	-	-	-	=	20	31	62	87	186	244	368	510	628	784	784	777	189	280	413	227	134	75	34	80	2	2	6682				
	D. 8.		_		H		L	_	_	L			L				L			L			_									
	2	L	L	L	L	L		L		L	L	L	L		L		<u> </u>	L	L	L	L	L		L	L		Ц					
				1			-		-	2	2	2																æ		ROR	m	0
•			-1			-	2			2	_	1		2														11		STO ERROR	2.18	2.80
2	? ?	┢			၉		2	4	9	3	S	2	9	-	9	-								F	F		Н	38		STD		
	9.0	_	Н		$\vdash$	H	┞	-	H		_	_	H	L	L	$\vdash$	H	L	$\vdash$	-	H	$\vdash$	L		L	L	Н					
	- - - -			1	L	1	9	*	*	10	*	14	12	9	11	9	*	2	-		L							87				58)
				1	1	3		14	8	23	91	31	27	88	20	11	7	-1	s									199			31)	116.
1				2	4	4	7	8	10	24	36	41	68	48	19	21	61	91	9	ည	1	_						372		ONS	41.3	÷
-	1 16:0	-			1	*	1	7	13	56	46	67	73	74	89	84	63	23	91	60	9	2						544		REGRESSION EQUATIONS	) + (N	(0.699)*STATURE(IN)+(16.58
-	1,1,1	-		1		2	2	12	16	33	40	20	86	80	122	01ء	83	54	37	61	2	2	3		L		1	773		O N	1)21	TATU
	0,		Н			3	*	9	11	22	44	29	96	Н	138 1	Н		96	58	40	8	9	3					937 7		SS 101	)×(	S#(
STATU	03.0		Н		2	1	1	4	Н		-	-	-			_	_	-			•	1	3	2		1	1			GRES	. 424	.699
9						_			$\dashv$	-	Н	$\dashv$		-	Ħ	156				20		11				_		1043		<b>8</b>		
0 63	_			1			2	1	9	13	13	23	42	75	114	133	138	130	123	82	38	18	14	*				870			11	11
9 0 99	┥,						1	-1		-	۲	-	28	42	78	86	107	105	84	78	48	31	8	2		1		761		~	0.544	0.544
99	0						-			-	6	=	2	26	36	61	99	99	96	68	36	20	17	4	4		-	476		<b>&gt;</b>	0	0
	0000									-			*	7	11	21	21	36	32	38	26	18	11	3	2	3		235		DE)	2.6	3.3
0 19	11									-		-	6	۵	9	8	91	12	81	16	14	18	9	2				136		S		
63	<b>⊣</b> 1									1		1			-	3	9	4	2	12	7	7	-	2		-	1	58		MEBN	68.71	4.61
6.0	<b>-1</b> I		1	7		1	1		7	1	7	1	1	1	-	2	6	2	•	2	2	2	9	20	2	-	1	32		Σ	9	<b>64</b>
19		-		1	1	1	-	1	+	$\forall$	-	1	-	+	$\dashv$		1		1		2		_	2		+	_	•	į	ZUZ		` ~
0		$\dashv$	-	-	+	$\dashv$	$\dashv$	-	+	$\dashv$	$\dashv$	+	-	$\dashv$	-	4	-	4			-		-	-	$\dashv$	$\dashv$	+	_		<u></u>		
0 02							1						ا																	S FF	TURE	
	78.0	78.0	77.0	76.0	75.0	74.0	23.0	72.0	2.0	70.0	69.0	68.0		66.0	65.0	9	63.0	62.0	9	9	200	282	57.0	56.0	2	54.0	53.0	TOTAL		1966	STATURE	VTC
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TABLE 110

A BIVARIATE FREQUENCY TABLE FOR STATURE AND VIC 1977 ARMY WOMEN

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	TOTAL	-		2	w	16	91	38	67	107	161	173	169	194	166	112	19	=	71	=	s)	2	1330		STD ERROR	1.93	2.14
	73.0	-	$\vdash$			L		_	-	L	-	L			L				-						S		
•	72.0	-	L	L			L		L	L	L	L	L	L	L	_		L					-				<u></u>
	0.					-	8			,	8												9			_	3.85
	日			ŀ			1		9	1	2	2											11		က္ခ	3.18	)+(1;
:	.0 70.0	-				2		7	*	2	9	3	1	1									27		SNOILE	)+(28	URE(IN)+(13
\	0.			-	2	2	3	4	8	10	4	7	3	1	1								20		EQUAT	594) #VTC(IN)+(28.18	<b>ATURE</b>
	67.0 68				1	2	3	9	16	18	91	81	9	*	1								80		SION	)×\T(	728) #STAT
	Н				1	ဖ	2	*	٤	91	81	12	٤١	41	9	2							116	!	REGRESSION	.594	. 728
E(IN)	0.99 0.					1	2	4	13	26	38	32	33	20	10	L	E						193	. 1	RE	0) ::	0) =
STATURE( IN)	64.0 65.0	L				2	3	ဖ	8	13	18	33	30	39	81	11	+	2			-		181			658	658
	63.0 64				1	1		1	1	٤	28	58	34	40	56	91	۷	2	1				184	(	<u>oc</u>	0.6	0.6
	62.0 63								2	8	11	16	33	33	42	30	6	3	2		1		189	i	DEV	2.57	. 84
	<u>-</u>									1	9	80	10	22	23	23	8	13	2	1	1	-	122	. (	_S L	8	2
	0.								-			ည	ဇ	12	18	14	8	12	1	4			90		Z	. 15	. 56
	0 60.0											1		9	3	2	9	7	2	1	1	-	36		MERN	64.	60.
u"	58.0 59.0											1		1	က	1	*	2	2	3	1		18	İ	MOMEN		
	_		,													2			11	2			~	:	2	•	
	0 23.0																1						-		HRMY	æ	
	56.0	0.5,	2 0	200	0 0	0.69	99	86.0	84.0		69.0	0	0	200	200	23.0	E. 0	2 2		200	200	81.0	TOTAL		1977	STATURE	ATC.
112										(	N	113	11/	1												:	

TABLE 111

A BIVARIATE FREQUENCY TABLE FOR STATURE AND WAIST BACK 1966 ARMY MEN

	TOTHE		-	10	11	32	96	182	307	546	838	751	874	944	808		450	373	181	62	32		•	SRR2	
ŀ	79.0	L	+					-	1		+		1			$\frac{1}{1}$	1	1				$\dagger$			
ŀ	78.0				1	1	1		2					1		†	-	1				1	1	0	,
ŀ	0 77.0	t		1		2		2	2	2														;	
ı	75.0   76.0			2		1	2	4	7	S	S	3	S)		,  -	-	-				-	1	$\downarrow$	90	S.
	74.0 75				-	3	æ	*	12	7	17	٤	13	æ	}	<u> </u>	6	-	1	L		$\downarrow$		-	
	73.0 74					3	8	23	23	24	53	23	56	2		21	9	2		L		1			22.
	72.0 73			~	2	2	20	27	47	99	77	9	9	36		2									3/2
	71.0   72			_	2	٥	15	28	Ŧ	72	90	69	3	5		43	12	11	2			1		:	***
2	Н				-	6	23	34	64	77	111	9	8	1	101	<u>.</u>	25	23	2					_	222
STATURE( IN)	69.0 70.0			-	-		15	26	9	97	138	2	138		2	111	89	37	12	C	4	-	_	- !	831
STA	68.0 68			L		•	,	6	3	80	137	127	9		8	137	109	23	24	·   ·		~			1043
	67.0 68		L	-		1	, C	-	2	63	=	-13	2		è	122	121	88	27	;	٩	*			220
	66.0 6					-	-	-  6	6	. 00	2,00	,	130		901	126	88	57	36	;  -		-		_	751
	0				-	1	-	1	, 6	200	160		3 4		7	71	9	89	6	3	07	O)	2		476
	1.0 65		L	1	1	$\downarrow$	-	1		-	15	:	1	3	23	11	Ş	5	120	3	13	4	_	_	236
	63.0 64	1	-	1	1		1		-	16	<b>∮</b> ^	16	-	P	21	25	22	٤	2	2	~	*	-		136
	62.0 6	1	L			1	1	1	$\downarrow$	-	-  -	<u> </u>	1	P	on	2	-	۶	•	1	2	2	-		8
	0				1		1		1	1	$\downarrow$	·  -	<u> </u> '	~  -	9	-	Ę		<u> </u>	•	က	2	L	L	32
	60.0 61	1		1	$\downarrow$	$\downarrow$	1	1	1	1	1	1		-		L	-	100	,		~	6	L	-	~
	59.0 60	1						$\perp$							Т	<u> -</u>					T.			<u></u>	-
			23.0	22.5	22.0	21.5	21.0	20.5	≥ 20.0	19.8	19.0	× 18.5	18.0		_		18.5		15.5	2		14.0	14:0	13.5	TOTAL

STO ERROR 2.35 REGRESSION EQUATIONS = (0.821)\*WAIST BACK (IN)+(54.15) = (0.222)\*STATURE(IN)+(2.48) ST DEV 2.60 1.35 68.71 17.73 MEAN 1966 ARMY MEN STATURE WAIST BACK

TABLE 112

A BIVARIATE FREQUENCY TABLE FOR STATURE AND WAIST BACK 1977 ARMY WOMEN

	TOTAL	-	-	၉	7	14	31	71	108	213	245	239	201	127	99	12	69	1330
	6																	
	73.0	T	1					1										
	ᅙ	l																
	72.0							2		69								ဖွ
	71.0	$\downarrow$	4										Ц	Щ		Ц	4	
	Н					••	-1	2	7	က								=
	20.0	+	+	_	Н		Н		-	H	Н	Н	Н	_	Н	Н		
. '						2		9	9	9	4		-1	2	-			27
	69.0	T	1			] 1	9	8	2	5	9	2	2					0
	68.0									16								50
	8		1	2	2	2	٤	œ	20	81	8	14	3	9				08
	2.0	4			L	L	_	L	Ľ.		L				L			
	1 67					8	၉	12	=	18	92	2	16	60	2			116
_	66.0	+	4	L	H	┝	┝	$\vdash$	$\vdash$	┞	┝	H	H	-	$\vdash$	$\vdash$		
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	19					2	60	2	12	34	47	39	36	15	ß			194
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	60.0	Ц			L	L	L		L	L	Ľ		2		Ľ		L	80
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1977 ARMY WOMEN	MERN	ST DEV	~	REGRESSION EQUATIONS	SIU EKKU
STATURE	64.15	2.57	2.57 0.520	= (1,280)*WRIST BRCK (IN)+(43,57)	2.19
WAIST BACK	16.08		1.04 0.520	= (0.211)*STATURE(IN)+(2.55)	0.89

A BIVARIATE FREQUENCY TABLE FOR STATURE AND WAIST CIRC 1966 ARMY MEN

	TOTAL				2	9	2	80	91	20	34	54	11	26	160	261	294	386	495	679	808	986	946	695	446	141	43	٤	2	6681
	0 79.0						_											1												1
	0   78.0							1										1	1	၉	_	1	1							8
	0 77.												1	1	1		7		1	1		1				1				11
	76.									2	1	1			*	2	2	4	1	9	89	3	က	2						39
	0.96				-	1			1		2	*	1	2	3	2	9	8	8	10	11	11	7	3	3	1				87
- 1	74.0							1			2	*	8	4	8	3	1.7	16	23	13	23	23	30	12	9					198
1	73.0							2	9	2	3	4	9	8	17	16	17	32	36	42	88	20	44	20	9	+	1			372
	1 72.0								3		9	4	11	11	11	13	31	23	29	29	87	81	63	37	52	8	1			544
1	71.0						1	3		2	1	8	12	12	18	28	48	64	96	96	88	112	9.6	89	88	7				373
≂⊓	0 20 0					1	1	1	1	9	2	8	10	14	36	31	36	89	63	101	139		136	98	43	12	1			937
	0.69 0	-			1				2	3	9	2	8	20	22	33	4.2	91	19	105	137		156	115	16	11	3	2		1043
-	0 89 0				_				1	2	9	2	2	6	12	16	1+	48	11	98	991	$\dashv$	137	122	69	30	9	9	2	970
	0.69.0		-		1	1	Ī			2	2	٤	9	9	10	15	21	40	63	63	84		114	86	78	23	7	1		194
t	0   66.0								1	1		9	9	3	10	16	1.7	81	18	46	54	23		89	47	16	9	1		476
I	0   66.0										1		1		+	9	9	8	18	13	56	32	36	37	28	10	01			236
- 1	0 64.0										2			2	3	2	9	12	9	11	91	01	22	16	20	8				135
F	63.0																2		3	*	7	9	7	7	16	2	2			28
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STD ERROR 2.53 REGRESSION EQUATIONS = (0.184)\*WAIST CIRC(IN)+(62.89) = (0,282)\*STATURE(IN)+(12,24) 0.228 ST DEV 2.60 3.22 MEAN 68.71 31.61 1966 ARMY MEN STATURE WAIST CIRC

TABLE 114

A BIVARIATE FREQUENCY TABLE FOR STATURE AND WAIST CIRC 1977 ARMY WOMEN

	IGINE	8	2			6	7	8	20	20	30	26	106	135	181	213	220	179	96	32	\$	066.	1990
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ı	0 70.0							1				2	2	4	7	_	9	2	8				/2
	69						1		2	2	-	*	9	9	8	a	2	4	-			1	20
	99 0.2						2		-	60	~	9	8	19	16	80	191	80				:	B
	6.0 67	-				2		_	-	L	4	2	6	Ξ	20	82	19	=	9	2	-		116
STATURE(IN)	99 0.99						2	-	20	60	~	~	191	┝	┞	╁	╁	╁	╁	╁	-		183
STATI	64.0	-		-	L		_			2	$\vdash$	L		┞	ŀ	+	+	+	╁	+	-	T	181
	63.0	-	~		-	ŀ	-	2				-		+	┞	+	╀	╁	╁	+		1	194
	62.0	╀	ig					$\frac{1}{1}$		2		6	F	+	+	+	╁	t	+	╁	-	†	122 189
.•	61.0		1	-	-	$\dagger$	-		6	╀	-	  -		+	·	╁	+	+	+	+	+	$\mid$	80
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	0.63 0.																ŀ						1
	66.0	42.0	41.0	40.0	39.0	38.0	37.0	36.0			33.0	32.0	31.0	_	28.0	28.0	27.0	26.0	26.0	24.0	23.0	22.0	TOTAL
	*						-		( N	(11	JE	1]3	, 1	81	91	1				٠,٠			

STD ERROR	2.51	7.61
REGRESSION EQUATIONS	= (0,200)*WAIST CIRC(IN)+(58,57)	= (0.216)*STATURE(IN)+(14.09)
~	0.208	0.208
ST DEV	2.57	2.67
MEAN	64,15	27.94
1977 ARMY WOMEN	STATURE	WAIST CIRC

TABLE 115

A BIVARIBLE FREQUENCY TABLE FOR STATURE AND WAIST HT 1966 ARMY MEN

	TOTAL		*	11	60	104	272	989	106	1263	1200	1094	625	329	147	89	24	9	6662
	79.0	H		_	L	-	L	L	<u> </u>	_	L	-	L		-	L	L		
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	77.0	H		L	L	_	-	ļ_	L	L	L	L	L	L	L	L	L	<u> </u>	
				3	a		~												11
	76.0			*	8	12	10	4	_										38
	75.0	H		Н	L			L	H	H		L	-	_	$\vdash$	L			
			-	-	16	23	28	15	ဖ	2									87
	74.0			1	13	39	29	54	27	8	2								198
	73.0	Ц	_			(*)	۳		-				L	L	L	L	L		15
					9	18	83	131	80	42	7	*							372
	72.0					8	81	168	183	100	27	6							544
	71.0	-		Н	Н		-	10				Н			H	-			
2	0.					1	37	164	248	212	98	30	1	1					773
STATURE( IN)	69.0 70.0 71.0					1	7	48	217	340	197	102	22	3					937
8TA.							2	14	88	328	332	202	99	10	1				1043
	0.89 0						1	9	31	191	331	300	100	37	3				970
	67.0	1		7					8					72	8	1			
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	0								-	=	£	143	160	83	36	7	2		476
	99	1								4	•	46	77	67	37	8	1		236
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	63.0	ļ	_	$\rfloor$								10	23	48	29	16	_		136
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	62.0	$\dagger$	+	+	1	1		_	$\dashv$	$\dashv$	1			9		8		$\dashv$	
	61.0	1	_	_	_			_			_				10			_	35
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	فا	80.0	49.0	48.0	17.0	99		N		11		81	Ľ	2 6	32	36.	2 2	34.0	TOTAL
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STD ERROR	1.41	1.14
REGRESSION EQUATIONS	= (1.035)*WAIST HT(IN)+(25.38)	= (0,683)*STATURE(IN)+(-5,07)
	41	141
œ	0.8	0.8
ST DEV R	2.60 0.841	2.11 0.841
MEAN ST DEV R	68.71 2.60 0.8	41.86 2.11 0.8

TABLE 116

A BIVARIATE FREQUENCY TABLE FOR STATURE AND WAIST HT 1977 ARMY WOMEN

TOTAL		7		11	23	90	97	166	263	265	406	<b>*</b> 03	140	65	20	ď	9	3	1330	1
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0 99 0						-	. 9	e G	Z Z		30	2							193	
64.0 65.0 6							u	,	1 0		19	13	S	-	•				191	
63.0 64	7							ď	١		84	48	12						194	
62.0 63									,	2	63	36	66						188	
61.0 62	₹.									2	13	51	=	4	P	4			122	
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53 0 2	7									1	Ļ	<u> </u>			1	Ļ			-	
		48.0	47.0	46.0	45.0	44.0	43.0	42.0	0.14	9	2	39.0	38.0	37.0	900	30.0	30.0	34.0	TOTAL	

TABLE 117

A BIVARIATE FREQUENCY TABLE FOR UPPER THIGH CIRC AND WAIST CIRC 1966 ARMY MEN

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107	┥.					1	-	*	1	2	7	12	10	14	21	11	10	2	3	-										100
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H CIRC	157					1			2	3		S	6	22	30	51	91	7	1	4	6	53	23	8	3					9
THIGH	Ц	L,	Ц	Ц		Ц		Ц	Ц	Ц				2	3	3	67	117	131	154	116	ည	2	Ц					Ц	816
∺  -   '	<b>-</b> 1					ı				က	-	2	9	=	16	56	91	98	177	220	289	213	105	33	10	8				1262
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16.0	Н	$\dashv$		$\dashv$	$\dashv$	+	$\dashv$	+	$\dashv$	+	$\dashv$	+	$\dashv$	$\dashv$	+	+	$\dashv$	+	$\dashv$	-	$\dashv$	$\dashv$	7	1	+	┪	-		+	
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	S	20.05	6.8		12.0	46.0	65.0	9	43.0	42.0	1	_		_	_		_	-	-	32.0	31.0	30.0	29.0	28.0	27.0	26.0	2	24.0	23.0	TOTAL
					٠.							(	N]	10	<b>H</b> ]	Э.	16	) H	И											

STO ERROR (1.310)\*UPPER THIGH CIRC(IN)+(3.03) = (0.451)\*WAIST CIRC(IN)+(7.56) REGRESSION EQUATIONS 0.769 0.769 1.89 ST DEV 21.82 MEAN UPPER THIGH CIRC 1966 ARMY MEN WAIST CIRC

1.21

TABLE 118

A BIVARIATE FREQUENCY TABLE FOR UPPER THIGH CIRC AND WAIST CIRC 1977 ARMY WOMEN

	TOTAL		6	2			3	7	oı	20	20	30	55	105	135	191	213	220	179	98	32	8	1330
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	27.0	$\ $		2			1			S	•	•	2	2	3	_	2						26
•	26.0	H	_	_				2	_	1	3	3	8	10	6	9	3						<b>a</b>
	25.0	H		_	_			1		1	7	9	9	_	3	17	+	13	2	_			
RC( IN)	24.0	$\parallel$	4											27	23	-	24			L			136
UPPER THICH CIRCLIN			$\dashv$			_			1	2	_	11	20	36	11	48	47	35	9	1		Н	253
ER THI	2.0	Ц	_	_			1		1	1	1	3	10	20	43	16	62	82	24	8	1		313
UPP	21.0 22.0 23.0									1	1	3	9	7	1.4	37	46	55	58	24	3	1	253
	20.02												1	1	2	ß	12	17	26	28	7	1	163
	19.0 20															1	7	12	28	24	12	4	88
																	1	S	7	10	9	1	27
	0 18.0	П																	1	3	3		7
	0 17.0																					1	1
	16.0	42.0	5	0	30.0	2 0	33.0	2	30.00	20.00	2 2	30.00	31:0	200	200	0.00	0.00	26.00	20.00	20.00	22.0	2000	TOTAL
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REGRESSION EQUATIONS	= (0.464)*WAIST CIRC(IN)+(9.44)	= (1.031)*UPPER THIGH CIRC(IN)+(4.85)
œ	1.79 0.692	2.67 0.692
MEAN ST DEV R		
MERN	22.40	27.94
1977 ARMY WOMEN	UPPER THIGH CIRC	WAIST CIRC

STD ERROR 1.29 1.93

TABLE 119

A BIVARIATE FREQUENCY TABLE FOR VTC AND WAIST CIRC 1966-ARMY-MEN

	TOTAL		1			•	,		1	15	02	2	Š	F	,	160	135	\$62	480	4.95	679	308	986	345	035	955	141	43	4	N	1999
	79.0	H	_		ŀ	╀	-		t	-		H	l	H	l	H	H	┞	l	┝	-	L	$\vdash$	ŀ	L	H	$\frac{1}{1}$	L	L	L	-
	78.0	H			L	+	$\mid$	╁	+	-	l	$\perp$	L	$\vdash$				L	ŀ	ŀ	F	L	L	L	L	H	L	L	H	L	-
	17.0			-	_	ŀ	H	H	_	2	L	L			-	l		_	ŀ		L	L	L	L	L	L	H	L	L	L	
	76.0			-	L	_	L	L		2	3		-	L	L	2	L	_	L	L	-	-			L	L	-	L		Ц	
	75.0	+	+	4		ŀ	L	L	-		L			2	2	L	L	ŀ	2		L	L			L	-	L	L	L	H	111
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	73.0	1	-	4			L	-	~	2	L	2		3	L		-	•	L	2	L		L		L		L			Н	ž
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	68.0	1	1	4			_	L			3	3	2	4	16	58	24	21	38	99	48	36	28	14	9	•	-	4		4	368
2	67.0	-	+	4				L			-		8	S	8	23	36	33	83	99	74	77	28	38	19	9	-				210
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	64.0 6	L	1	1							_		Ц	2	-	o	2	2	36	28	98	129	146	140	87	*	8	-	-	1	734
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STD ERROR 2.55 REGRESSION EQUATIONS = (0.672)\*WAIST CIRC(IN)+(43.36) = (0.623)\*VTC(IN)+(-8.64) R 0.647 0.647 3.34 ST DEV MEAN 64.61 31.61 1966 ARMY MEN VIC WAIST CIRC

TABLE 120

A BIVARIATE FREQUENCY TABLE FOR VIC AND WAIST CIRC 1977 ARMY WOMEN

,	TOTAL	1	1	·			6	٤	6	20	20	30	22	105	135	161	213	220	179	96	32	80	1330	
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	9 0									~	*	2	a	12	17	29	17	80	+				101	EGU IST C( IN
2	0   58.0   59.0   60.0   61.0   62.0   63.0   64.0   65.0   66.0   67.0   68.0		Ī							2	•	3	S	21	30	25	24	21	12	4			151	REGRESSION EQUATIONS (0.594)*WAIST CIRC(IN)+(43.96 (0.525)*VTC(IN)+(-3.85)
VTC( IN)	62.	1	1				_	-	-	*	2	a	01	91	15	33	24	34	21	8	1	`	173	RESS 594) 525)
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TABLE 121

A BIVARIATE FREQUENCY TABLE FOR WAIST CIRC AND WEIGHT 1966 ARMY MEN

	TOTAL	_		6	1	+	1	2	•	=	19	13	20	43	63	11	96	121	191	800	245	913	376	434	562	584	980	630	631	518	363	287	196	96	88	22	01	9	9696
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	50.0	$\mid$	L	┞		L	H	L	-		L	L	L	L	L	L	-	L	-	$\vdash$	-	-	-	L	L	L	L	-	L	L		L	ŀ	L	L	ŀ	-	Н	<u> </u>
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	31.0	L	]			Н			_	-			4	Ц		Ц			~	10	Н	-	69	Н	T	145	Н	٦	$\dashv$	2	-			L				+	
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	26.0 2.																									-	-	2	3	3	=	62	38	18	80	•			141
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	0 24.0							1															1			1						1	1			-	1	-	2
	23,0	0.002	200	285.0	280.0	955.0	250.0	245	240.0	235.0	0 060	986.0	0.000	916	010	905.0	0 000	195	190.0	186.0	180.0	175.0	170.0	165.0	180.0	186.0	160.0	145.0	140.0	135.0	130.0	125.0	180.0	118.0	0	50	100.0	98.0	TOTAL
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STD ERROR 1.67 12.08

REGRESSION EQUATIONS
= (0.118)\*WEIGHT(LB)+(12.84)
= (6.202)\*WARIST CIRC(IN)+(-36.98)

R 0.856 0.856

ST DEV 3.22 23.34

MEAN 31.61 159.09

1966 RRMY MEN HRIST-CIRC WEIGHT

TABLE 122

A BIVARIATE FREQUENCY TABLE FOR WAIST CIRC AND WEIGHT 1977 ARMY WOMEN

	TOTAL	-	-	1	2	1	5		B	10	6	16	30	58	62	97	114	136	142	138	157	34	95	63	45	30	11	4	1330				
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	38.0	T	T			_										1													60			2)	-25
	37.0	╀	┞	H		H	L	H		L	$\vdash$		_			_		_		Н	Н		H		4	_		-				3.1	)+(
	36.0	_	L	L			2			2		1		1																	SNS	+	VI );
	_	-					-		-					3	2														Ģ		EQUATIONS	LB)	(5.531)*WHIST CIRC(IN)+(-22
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	30.0		Γ								<b>M</b>	3	a	12	14	24	61	91	14	12	7		2						135		œ	7.0	0.787
	29.0	+	t	$\vdash$	$\vdash$	-	$\vdash$	L	$\vdash$	$\vdash$		Н	2	7			_	- 2	1	9	3	-	3	~			H			1	>>		
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	[2]	220.0	215.0	0.012	203.0	200	0.081	0.081	1001	1001	0.02	0.0/1	160.0	0.001	2001	100.0	0.041	120.1	130.1	1.001	120.0	150.0	0.011	105.0	200	0.001	0	2 2	TOTAL		1977	WAIST CIRC	WE I GH1
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## SECTION III

Unique Male and Female Bivariates

TABLE 123

A BIVARIATE FREQUENCY TABLE FOR ANKLE HT AND FOOT LENGTH 1977 ARMY WOMEN

TOTAL				က	12	31	69	166	183	240	293	183	92	43	11	1	000.	1330
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00 6.26				1	3	3	Ξ	6	*	9	*	2					:	43
4.76   6.00					2	9	=	17	13	13	12	3		1			;	8.3
4.60 4.7					*	8	50	9	*	38	36	11	9	9		L	;	515
4.25 4.				1		=	20	87	09	63	5	46	54	9	-	_	1	320
4.00 4.					-	_	=	18	33	67	77	43	22	<b>a</b>	-			284
3.76 4.						_	4	13	27	=	94	36	28	=	9			214
3.60 3.						-		-	ما	13	22	35	12	٤	~		;	88
3.26 3.								-		9	7	2	4	2	_			£
3.00 3.	$\prod$			Ļ		L			_			-		Ļ				_
60	11.76	11.50	1		1	-1.	10.60							0 0	2	9.50	9.00	TOTAL

STD ERROR 0.36 (0.365)\*FOOT LENGTH(IN)+(0.78) (0.552)\*RNKLE HT(IN)+(7.21) REGRESSION EQUATIONS 11 0.449 ST DEV 0.40 0.49 4.27 MEAN 1977 ARMY WOMEN ANKLE HT FOOT LENGTH

TABLE 124

A BIVARIATE FREQUENCY TABLE FOR ANKLE HT AND SPHYRION HT 1977 ARMY WOMEN

	_	Τ	Π						
	TOTAL	2	12	237	919	437	116	9	1330
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	26	Ļ	L	Ļ	L	L	_	L	
	5.26			=	9	9	က		43
**	00	L	L	L			L		
	6.00		2	26	28	23	<sub>w</sub>		87
=	36	$\perp$		Ľ	Ľ			<u> </u>	
ANKLE HT(IN)	4.75	_	. 6	29	89	20	16		216
m T	4.50			L					8
AKK	4.		٤	74	o,	60	212	_	350
	i I		L	_	139	108	2	L	ñ
	4.25		_	40	8	96	87	_	284
	0			_	118	٥	2		2
	3.75 4.00	$\ $	1	<b>_</b>	75	86	26	2	4
	ß			26	~	80	8		214
	3.7	Π	T	_		Lo	12		98
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	3.60	П	T	T	9		9		23
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		3.6	3.21	3	Z   Z	2.0	7.7	5 i	101
	•	(1	NZ I	14	N	01	97	HA	s

1977 ARMY WOMEN	MERN	ST DEY	مد	REGRESSION EQUATIONS	STD ERROR
ANKLE HT	4.27	0.40	0.225	= (0,422)*SPHYRION HT(IN)+(3,20)	0.39
SPHYRION HT	2.54	0.21 0.225	0.225	= (0,120)*ANKLE HT(IN)+(2,03)	0.21

TABLE 125

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SLEEVE LENGTH 1966 ARMY MEN

-	TOTAL.	9	13	13	36	97	134	207	385	670	621	837	963	790	672	573	298	230	135	55	25	101	2	6	2	6682
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r	68.0					2	2	9	1	6	2															13
t	46.0 47.0		L				2	6		3	-	-														11
t	45.0 46				2		*	_	2	ß	2		3			L		-								22
t	44.0 45	-	L	-	2	2		3	8	80	9	•	2	2	L		L									33
_ h	43.0	-		-	7	2	8	7	6	11	2	۷	8	9	3	_					L					70
- H	42.0 4	-	3	1	ક	9	8	16	13	14	16	81	13	8	9	2	L									130
_ h	0.14 2.0	-	2		8	9	12	17	23	17	21	27	16	16	10	9	2	1	1							186
	0.0	-		2	•	13	22	24	40	42	36	45	38	31	13	91	2	9	1	2	L					338
= = =	38.0		3	*	2	11	14	36	47	70	53	77	11	37	38	30	21	2	1	9	1					518
T/CHES	38.0		2	2	3	23	13	17	99	99	36	106	111	74	24	46	12	16	9	2			1			712
BUS	37.0	-		1	3	13	14	32	69	106	96	116	139	130	9,	28	31	19	9					1	-	116
- F	36.0		1	1	3	2	17	23	63	16	113	142	184	140	112	28	1+	22	16	2	2	1				1052
- +	6.0				1	7	10	13	41	99	88	133	189	136	148	143	61	44	27	8	3	2	2		_	1111
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STD ERROR

2.38

= (0.75)\*SLEEVE LENGTH(IN)+(12.41) = (0.254)\*BUST/CHEST CIRC(IN)+(24.42)

REGRESSION EQUATIONS

0.429

2.63

MEAN 36.92 33.80

1966 ARMY MEN BUST/CHEST CIRC SLEEVE LENGTH

ST DEV

TABLE 126

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SLEEVE OUTSEAM 1977 ARMY WOMEN

	TOTAL	ŀ	2	-	7	28	20	25	146	168	234	204	206	112	63	20	æ	2	1	1330	
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= (0.427)\*SLEEVE OUTSERM(IN)+(25.67) REGRESSION EQUATIONS 0.200 . ST DEV 2, 49 34.72 21.18 MEAN 1977 ARMY WOMEN BUST/CHEST CIRC SLEEVE OUTSEAM

STD ERROR

= (0.093)\*BUST/CHEST CIRC(IN)+(17.95)

0.200

147

TABLE 127

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WAIST FRONT 1977 ARMY WOMEN

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TABLE 128

A BIVARIATE FREQUENCY TABLE FOR CROTCH LENGTH AND WAIST CIRC 1977 ARMY WOMEN

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TABLE 129

A BIVARIATE FREQUENCY TABLE FOR NECK CIRC AND SLEEVE LENGTH 1966 ARMY MEN

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17.	H	1			1	1		1	1	8	9	1	1	2												2
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.0 15.5		-	2	£	9	27	38	17	110	123	138	081	061	140	120	98	38	20	16	2	2		1			1283
8 15			1	1	5	19	19	40	7.0	151	137	201	232	197	131	118	63	41	21	8	1	1				1457
.0 14.			-	1	3	6	20	26	70	105	144	961	264	184	187	160	98	99	43	17	9	+	3		1	<b>₽</b> 69
.5 14.					1	3	2	13	20	46	67	81	108	118	911	112	64	19	33	91	8	+	1	2	1	698
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STO ERROR	0.76	1,44
REGRESSION EQUATIONS	= (0.195)*SLEEVE LENGTH(IN)+(8,13)	= (0,711)*NECK CIRC(IN)+(23,33)
œ	0.372	0.372
ST DEY	0.81	1.56
MEAN	14.72	33,79
1966 ARMY MEN	NECK CIRC	SLEEVE LENGTH

TABLE 130

A BIVARIATE FREQUENCY TABLE FOR SPHYRION HI AND FOOT LENGTH 1977 ARMY WOMEN

-	TOTAL				1	9	12	31	69	166	193	240	293	183	98	43	11			1330
	3.50						1													2
	3.25								2	*	3	2	-							17
HT(IN)	9.00				c	2	3	8	61	38	14	48	**	17	13	₹				237
SPHYRION HTEIN)	30 2.75		1		•	4	3	16	23	99	83	100	123	74	52	8	3			616
8P	5 2.50						+	7	91	43	23	73	93	94	0*	42	*	1		437
	30 2.25							1	8	13	6	15	53	16	91	9	**			116
	6 2.00									1		2		2	1					6
	1.76	11 75 11		20.11	11.25	11.00	L	Ľ		1	יאר פי		丄	00.	┸	0, 0	20.00	0.50	30.0	TOTAL

1977 ARMY WOMEN	MEAN	ST DEV	œ	REGRESSION EQUATIONS	STO ERR
SPHYRION HT	2.54	0.21	0,213	= (0,092)*F00T LENGTH(IN)+(1,66)	0.21
FOOT LENGTH	9.57	0.49	0.213	= (0.490)*SPHYRION HT(IN)+(8.33)	0.48

TABLE 131

A BIVARIATE FREQUENCY TABLE FOR STATURE AND SLEEVE LENGTH 1966 ARMY MEN

6682 963 673 79.0 Ø \_\_ 39 87 661 53 372 65.0 [66.0 [67.0 [68.0 [69.0 ] 70.0 | 71.0 | 72.0 ] 544 88 29 773 STATURE( IN) 1043 | 937 970 751 476 236 60.0 | 61.0 | 62.0 | 63.0 | 64.0 136 28 32 38.6 37.6 37.0 36.6 36.6 TOTAL 31.0 30.5 30.0 28.5 28.6 28.6 35.0 34.5 34.0 33.5 33.0 32.5 SCEEVE LENDINI IN

STO ERROR 1.86 (1.170)\*SLEEVE LENGTH([N)+(29.17) (0.419)\*STATURE(IN)+(5.01) REGRESSION EQUATIONS 11 11 R 0.701 0.701 2.60 ST DEY MEAN 68.71 33.80 1966 HRMY MEN SLEEVE LENGTH STATURE

TABLE 132

A BIVARIATE FREQUENCY TABLE FOR STATURE AND SLEEVE DUTSEAM 1977 ARMY WOMEN

ſ	٦.	Τ	Γ-	П	П	П												_	
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	62.0							<b>,</b>	9	12	21	43	23	6	2	2			2
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STD ERROR	1.60	0.73
REGRESSION EQUATIONS	= (1,720)*SLEEVE OUTSEAM(IN)+(27,73)	= (0.355)*STATURE(IN)+(-1.60)
~	0.782	0.782
ST DEV	2.57	1.17
MEAN	64,15	21.18
1977 ARMY WOMEN	STATURE	SLEEVE OUTSEAM

TABLE 133

A BIVARIATE FREQUENCY TABLE FOR STATURE AND WAIST FRONT 1977 ARMY WOMEN

TOTAL			*	7	1	24	54	84	194	218	281	216	159	62	12	3	1330	STO EI
73.0	-	-		-	-	-	_		_	-		_		-	_		-	
72.0	-	_			-	-		1	2	2	-	-		-			9	
0 71.0			-				1	2	3	9		-		-			11	S
0 10.0						1	1	3	7	9	7						27	EQUATIONS
0.69.0				3	-	٤	2	3	14	10	29	3					90	EQUE
0.89 0.			1	2	2	7	8	13	13	22	11	L	2	2			90	REGRESSION EQ
66.0 67.0				1		*	7	=	17	92	92	14	13				116	REGRESSION
		-			2		=	15	38	40	46	52	σι	σ			193	RE
64.0 65.0		_	1		1	2	6	21	33	37	42	36	13	2	2	2	161	2
63.0 6			-		3	2	9		28	33	43	35	56	9	2		194	<u>مح</u> (
62.0 6					-	S	6	15	12	23	9	37	29	=	6	1	183	ST DEV
61.0 6							*		9	S	33	54	28	12	*		122	ST
Н					-				~	۵	20	22	20	7			80	MEAN
59.0 60.0	1		-				-	-	~		7	-	13	~		1	36	₹ (
58.0 5						-	-	-	2	-	2	٥	6		-	1	18	OMEN
57.0   5		-	_	-		-	+	-	4		_	6		2	4	1		ARMY WOMEN
9			1	1		$\prod_{i=1}^{n}$									┦			_
2	18.0	18.5	18.0	17.5	_	18.5			_		Ľ	13.5	1	12.8	12.0	11.6	TOTAL	1977

2.39 0.96 = (0.915)\*WRIST FRONT(IN)+(50.92) = (0.148)\*STATURE(IN)+(4.97) 0.368 0.368 2.57 STATURE WAIST FRONT

## SECTION IV

## Double Male/Female Bivariates

TABLE 134

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND BICEPS CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

	TOTAL	/1	2./	11	147	43 /	/ 98	1 /113	414/	691 / 3	9 / 998	1569 / 14	1161 / 63	942 / 38	573 / 233	209 / 310	192 / 19	16 / 216	98 / 9	e /	9 /	2899	
	0.81				1/		72		11										_			-	
	0 48.0		_		3/	1/4	3/	1/	1/									1				2/	
	0. 47.0			2/	3/	3/			1/1	1/1			/ 1									=/	
	0.04 0.0		>	_	/1	3/	12	/9	3/	3/ 1												2/2	
	0.94   0.			<u>`</u>	/2	/1	11	/9	/6	3/	6/ 2	2/										\$/ /	
	0.44.0			72	1	/9	11/	/21	/12	791	3/	1/										5/	
	.0 43.0			=		<b>/8</b>	12/	21/ 1	14/	782		3/ 2	1 /1	1/ 1	L							130	ERROR 11.73 0.71 1 ERROR 11.74
	41.0 42.0				3/	1/4	181	35/	124	1 /66	2 /92	1 /01	9 /7	2/ 1	1					L		\$\frac{1}{2}	STD ERROR 1,73 0,71 STD ERROR 1,74
	40.0					3/	21/	38/	/98	/16	1 /94	31/ 1	8/ 3	1 /1	1/2						_	<b>8</b>	
(CC 1N)	39.0 40			L		/9	12/	48	707	1 137/	114/	7 /68 1	9 /26 1	8 /6 1	2/ 11	L			_			619	
BUST/CHEST CIRCLINI	38.0	ļ	-		-	*	3	/62	717	134/	1 198/ 2 114/	3 166/	8 88/ 1	4 207 1	26 3/ 22	>	,	/ 2	\			27	TECRESSION EQUATIONS  1.833)#BICEPS CIRC(IN)+(13.63)  0.310)#BUST/CHEST CIRC(IN)+(1.00)  REGRESSION EQUATIONS  2.004)#BICEPS CIRC(IN)+(13.52)  0.257)#BUST/CHEST CIRC(IN)+(1.00)
<b>B</b> UST/	37.0	-	L				1	È	62/	121/	214/	2 287/		0 60/ 14	64 17/ 2	1	18 1/1	1		ļ	-	[ <u></u>	HATLONS CIRC(I CHEST CI CHEST CI CHEST CI CHEST CI CHEST CI
	36.0	-	-		L	_		à	18/	74/	186/	286/	5 267/ 1	3 161/ 20	28	/9			-	-		18	NN EQUALINATION ON EQUALINATION OF EQUALINATIO
	96.0	1	  -					2	1/2	33/	101/	260/	2 303/	8 267/ 23 151/	156/ 35 111/ 50	47/ 68 23/ 78	54 4/ 43	L	-		-	E/	REGRESSION EQUATIONS (1.833)*BICEPS CIRC(1) (0.310)*BUST/CHEST CI REGRESSION EQUATIONS (2.004)*BICEPS CIRC(1) (0.257)*BUST/CHEST CI
	34.0	-		L			_		*	è	104	103/	187/	4 237/	19 156/		-	+	1			18/	
	33.0		-	_			-	-		/2	à	712	/18	~	717 10 1337	61/36 59/60	12/ 63 21/ 47	5/ 44 4/ 52	1			,/ §	R = 0.754 = 0.754 = 0.718 = 0.718 = 0.718 =
	32.0							-	-		7	*	27/	ŀ	6	-	2		L	Ţ		/ <u>z</u>	<b>회</b>
	31.0			ŀ	L	L	-		-			_	9	-	ľ		-	1	L	L.			ST DEV 2.63 1.08 ST DEV 2.49 0.89
	30.0				-		-				-	_	-	77	-	1	10 0 /1	1	•			/ 	MEAN 36.92 12.70 12.70 HEAN 34.72
	29.0		ŀ			-	<del> </del>	-		-			-	-	ŀ				-	, ,	•	7	
*	28.0			$\mid$		f	<del> </del>	+	$\mid$					-	+				l	$\dagger$	ţ.		RHY NE HEST C CIRC CIRC RHY WO HEST C
	27.0	18.0	17.5	1.0	9.9	19.0	9.9	_	┙	13	Ŀ	l	9.21	1 1 2 2	L	_1	9.0	0.01	9.6	0.6	9.6	0.6	1966 ARMY MEN. BUST/CHEST CIRC BICEPS CIRC 1977 ARMY WOMEN BUST/CHEST CIRC

TABLE 135

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND HIP CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

TOTAL	╢	1			2	-	2	,	12	/04	70 / 1	126 / 2	188 / 4	339 / 10	671 / 15	785 / 19	1036 / 24	1113/18	1113/17	720 / 8	380 / 6	197 / 2	34 /	4	1890	ì							٠.,	
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- 1	42.0		-				1			ŀ		1	727	31,		1 63/	*	2		4	+	+	+	+	<u> </u>		STO ERROR	1.59	27	•	STO ERROR	1.70	75	
	41.0 4						1	١	ı	1			2		/80	30,	18	8	>		1	1	1	1	188/	1	STD			₹	STO	7.	-	
	Н				-					ŀ	>	2  6	_	_	28/	82/	- 88	36	è	¥	2				338				6	- D			193	
E S	0 40.0										-	8	. 1	33/ 2	78/ 7	9 128/ 4	9 122/ 9	83/ 3	34/	<u>1</u> 0	>				618	32				(0.745)*BUST/CHEST CIKC(IN)+(9.53)			IN 7031 BIST/CHEST CIRCLIN)+(13.19)	
BUST/CHEST CIRC(IN)	39.0	11	1		1	1	1	1	7		<u>-</u> ام	7/2	9 2	16/	7		167/ 9	9	E 105/ 5	53/ 1	10	/2	4		712	98	,	(00	707.0	NI	٠,	7.99)	CLIN)	
UST/CHE	38.0	11	+	†	1	1			1		2	1	6		18	17	21	ייו	L	2	36/2	/*	>	1		88	0 2		[0.853]#HIP CIRCLIN/+(0.20)	Z	SNS	(0,711)#HIP CIRC(IN)+(7,99)	T CIR	1
-	37.0		+	+	+		1	+				1/ 3	1	2/ 10	16/ 18	1 38 /9	91/ An 82/ 55 135/ 28 189/	238/ 37 239/	303/ 15 195/	-	-	18/	72	>	1052	18	SNOTTONO COLORIONS		ואר	CHES	REGRESSION EQUATIONS	IRCI	CHES	
	38.0	$\parallel$	+	+	-							-	1 /	2 /	3/ 19 1	1/ 36 4	7, 66 13	3/ 67 23	1/ 23 30	45 227/ 31 345/ 15 207/	8/ 3	Г	12/	1	Λ	212	100	בו בי	71 F	«BUST/	ION EC	HIP (	BHST,	· •
	95.0		+	-			Н			-	-	L	F	7	6	6 66 /	9 07 /	3E 69/ 43 179/ 67	48 150/ 38 274/ 23	/ 31 34	/ 4 148/	L	-	9/	1111	183	ניים בי	KESSI	823)	745)	RESS 1	71111	703)1	;
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	9	32.0			L	-	-	-	-	L	-	-	$\mid$			\  -	\ - - -	*\i	2 2	30,00	200	2	8	1/2	1	105		>	э 0	2.46 0.797	ST DEV	0	, 0	
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	-	.0 29.0																				<u> </u>		1				Z Z	CIRC	HIP CIRC	NAMEN	7	BUSI/CHESI CINC	
		0 28.0			T			Ī																ļ				- YHY	CHEST	IRC	JR MY	1001	רחבי	IRC
1		27,0	53.0	62.0	51.0 F	50.0	0.0	48.0	47.0	46.0	46.0	10.2	43.0	42.0	41.0	0.07	9	0	32.0	38.0	36.0	34.0	33.0	32.0	30.0	TOTAL		9961	<b>MIST</b> /€	TP C	767			HIP C
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TABLE 136

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SCYE CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

	TOTAL	/2	/2	/ 11	7 02	/ 67	/ 99	118/	/ 612	346 /	660 / 1	176/	1048 / 8	1137 / 16	930 / 24	7221 73	422 / 147	166 / 244	53 / 266	24 / 272	5 / 164	4/ 70	17 21	,	,	1330								
	49.0				<u> </u>	<u> </u>	-			-					-	-			-			-	ŀ			7								
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	42.0 4			/2	`	/9	/8	14/	797	/81	24/	/11 1	791 2	\	3 2/	3 2/	1	L	L							061	0000	שום בתאטא	97	0.96	!	STO ERROR	63	0.62
	41.0				3/	/8	ور	/01	792	30/	45/	782	707	4 3/	1/1	3 /	2 3/	L			1					11 186	010	200		O	i	STO	_	0
	40.0	>		77	8	/*	`	121	36/	//9	/99	/19	/91	2 25/	14 6	9 2/	/ 8	/1 9	/1		/				li	338				55.)				80)
TRC( IN)	39.0	L		/2		/9	8	/42	/14	/19	94/	/601	/68 1	/94 7		/8   91	14 41	1/ 18 1/	/ 8	9						919 99			66	1)+(3			[]	4)+(4
BUST/CHEST CIRCLIN	38.0				=	12	Н	/91		/69	П	1991	1 143/	-	3 61/	127/	Ш	1/ 82 /8	2/ 13 /	7 2/	/1   1	11		H		217			1)+(12,	: IRC ( 1)			1)+(5.	RCCI
908	37.0		/1	7.	72	/1 /	/8	/8 /	/22/	/11		/841	/802	_	_	7 17 62/ 11	72 /11 /2 /42	L	72 18 /2	/1 81 /	1 4 1/	11				116 911	0110		1RC 11	HEST (		BTIONS	IRC( IN	HEST (
	36.0				Ц	/9	2/ 1.	1 /1	2/ 14/	/82 /	Н			7 258	238/ 1 181/ 3	/ 13 111	/ 36 24	/ 67 11.	7 58 2	, 4G	3	1/ 1/1/				212 1062	101		SCYEC	BUST/C		ON EGU	SCYE C	BUST/C
	36.0	H					1/	17		/91 /01					-	2/ 1 177	08 61 /9	8/ 36 22	9 09 /	66 6/ 52 3/ 40	1/ 23	1 1 /				1111 201	SHATTOHOU COLOURS	שיים שיים	364) #	(0.325)*BUST/CHEST CIRC(IN)+(5,55)		REGRESSION EQUATIONS	(2.005) SCYE CIRC(IN)+(5.11)	(0.287)*BUSI/CHEST CIRC(IN)+(4.80
	34.0							L		1 72	Н	26/ 38/			103/ [18	91 1 /0	11 7 750	46/ 21 2	9/ 44	3/ 66	17. 45	B /		Н		37 501	ù		11	11		Æ	= (2)	0
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	0 32.0					1						/1	1	//	2/		-	11/ 2			/ 42	/ 21	6 /		. 1	ខ្ល	et new		2,63	1.28		ST DEV	2.49	0.94 0.758
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	29.0 30.0																		1/	1	( )	1 /	/ 3	-		-				17.54		MER	34	14.77
- 1	28.0 28																		`		7					7	NU		S S	SCYE CIRC		MOMEN	CIRC	
ŀ	27.0 2			_																						$\setminus$	A CO		/CHEST	CIRC		1977 HRMY MOMEN	/CHEST	SCYE CIRC
	-	23.0	22.6	22.0	21.6	21.0	20.6	20.0	18.6	ㅗ	19. 18.	L	L.	1	19.6	<u>_</u>	_	16.0	-	14.0	13.6	13.0	12.6	12.0	9.	TOTAL	1986	3	BUST,	SCYE		1977	BUST,	SCYE

TABLE 137

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SHOULDER CIRC 1966 ARMY HEN / 1977 ARMY WOMEN

244	¥	3/	}	11	18	11/	187	/ 08	140 /	7 063	104	/ 988	936 /	1132 /	1036 / 6	829 / 8	670 / 16	280 / 20	108 / 24	38 / 21	8 / 20	9 / 6	6 /	,	/	133							
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	40.0					ļ				H							Н			П		Γ	l										
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_1	ᅱ					ŀ		/8	12	/09	130/	154/	94/	38/	18/	2/ 10	>	\								E /			(0.895)#SHOULDER CIRC(IN)+(-2.96)	F( 14		(n. 973)*SHOILDER CIRCLIN)+(-3,73)	(0,695)*BUST/CHEST CIRC(IN)+(15.38
BUST/CHEST CIRCLIN	38.0						I			35/	106/	-	[	120/ 2	35/ 13	10/ 15	3/ 20	17	11.0							712		,	÷ ≏	(N		+ -	(X
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BUST	37.0	L	L	L	L	L		L	16	1	38/	181/	7697	279/	115/	25/ 24	1.	١	1		L			L	L	<u>e</u>	01101	KEGKESSIUN EUUHIIUNS	CIR	STC	REGRESSION EQUATIONS	CIR	21.15
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TABLE 138

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SHOULDER LTH 1966 ARMY MEN / 1977 ARMY WOMEN

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TABLE 139

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND SLEEVE INSEAN 1966 ARMY HEN / 1977 ARMY WOMEN

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TABLE 140

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WEIGHT 1966 ARMY HEN / 1977 ARMY WOHEN

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TABLE 141

A BIVARIATE FREQUENCY TABLE FOR BUST/CHEST CIRC AND WRIST CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

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TABLE 142

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND ANKLE CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

12.00   126.00   26.00   27.00   28.00   30.00   31.00   32.00   33.00   36.00   36.00   37.00   39.00   40.00   11.		TOTAL	2./				11.7	30 /	721	117 /	260 / 1	4637 4	61 / 888	984 / 37	1137 / 103	1201 / 168	896 / 232	497 / 242	210 / 273	42 / 134	10 / 12	3/ 37	9 /	1 2	285	
CROICEGO   26.00   27.00   29.00   30.00   31.00   32.00   34.00   36.00   37.00   39.		9.0		Ц		_						_	L		L									1	99	
CROTCING   26.00   27.00   28.00   29.00   31.00   32.00   33.00   34.00   36.00   37.00   38.00   37.00   37.00   38.00   37.		Н											72		- 72	1/									6	4
CROTCH HEIGHT (1N)  100   256.00   29.00   29.00   30.00   31.00   32.00   34.00   35.00   36.00   37.		Н									1/	72	2/	/8		5/		2/							1,	
CROTCH HEIGHT (1N)  100   256.00   29.00   29.00   30.00   31.00   32.00   34.00   35.00   36.00   37.		38.0	H			-						L								Н		_			/	۱
CROTCH HEIGHT(IN)  **COT   26.00   27.00   28.00   30.00   31.00   32.00   33.00   34.00   36.		8						/1	2/	16	11	/91	/11	21/	/11	/8	/7		2/						8	
CROTCH HEIGHTIN)  CROTCH HIND  CROTCH HEIGHTIN)  CROTCH HEIGHTIN)  CROTCH HIND  CROTCH HEIGHTIN)  CROTCH HIND  CROCCH HIND  CROTCH		Н					1/	5/	/9	121	14/	24/	42/	/94	1 /07	33/	20/	/8	3/	1/					992	
CROTCH HEIGHTIN)		36.(									Ţ ,				1 7	1 /	) ,			,					1"	
CROTCH HEIGHTIN)		9.6	-				3,	4,	12,	16,	30,	62,	16 1		96 1	85,	_	1 25,		1 17		]			60 \ 1 80 1 81	
CROTCH HEIOHT(IN)  100   26.00   25.00   29.00   30.00   31.00   32.00   33.00   34.  11   1   1   1   2   1   2   4   6   6   6   6   6   6   6   6   6		Н					1/	2/	12/	/97	14	796	/81		/96	706		/15							Ι\	
CROTCH HEIOHT(IN HE)))))))   1		34.00	L							-	-		1.	_		6 16	_	4	Н		1		Н	Н	0 0 0 0	
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100   25.00   25.00   28.00   29.00   30.   30	1947	33.					1	1	1	/	1	1				/ 28	/ 28			.		1 /			128	
100   25.00   25.00   28.00   29.00   30.   30	표	2.00	L				9	9	16	27	1 66	98	4 188	7 204	7 236	3 277		7 121	Ц	Ш		9			190	
100   25.00   25.00   28.00   29.00   30.   30	CROT	Н						11	/1	21/	36/	/89	1111	146/	187/ 1	192/ 2	128/	81/4	33/3		21	/1				
100   25.00   25.00   28.00   29.00   30.   30		Н.					1/	2/	3/	17.	11			10	2/ 20	1/ 34	55	47 49	37 68	8/ 25	/ 18	1 4			15	
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100   26.00   26.00   28.00   29.   1/   1/   1/   1/   1/   1/   1/   1	1	П							1/	1/	/8	/8	112	25/	30/	42/			13/		27	1	/			
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1.82	0.56	STD ERROR	1.68	0.48
= (0.527)*ANKLE CIRC(IN)+(28.34)	= (0.050)*CROTCH HEIGHT(IN)+(7.28)	REGRESSION EQUATIONS	= (0.812)*ANKLE CIRC(IN)+(23.44)	= (0.066)*CROTCH HEIGHT(IN)+(6.18)
0.162		œ	0.231	0.231
1.84	0.57	ST DEV	1.72	0.49 0.231
33,05	8,93	MEAN	30.07	8.16
CROTCH HEIGHT	ANKLE CIRC	1977 ARMY WOMEN	CROTCH HEIGHT	ANKLE CIRC
	33.05 1.84 0.162 = (0.527)*#ANKLE CIRC(IN)+(28.34)	HT 33.05 1.84 0.162 = (0.527)*ANKLE CIRC(IN)+(28.34) 8.93 0.57 0.162 = (0.050)*CROTCH HEIGHT(IN)+(7.28)	33.05 1.84 0.162 = (0.527)*ANKLE CIRC(IN)+(28.34) 8.93 0.57 0.162 = (0.050)*CROTCH HEIGHT(IN)+(7.28) EN MEAN ST DEV R REGRESSION EQUATIONS	33.05 1.84 0.162 = (0.527)*ANKLE CIRC(IN)+(28.34) 8.93 0.57 0.162 = (0.050)*CROTCH HEIGHT(IN)+(7.28) EN MEAN ST DEV R REGRESSION EQUATIONS 30.07 1.72 0.231 = (0.812)*ANKLE CIRC(IN)+(23.44)

TABLE 143

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND HIP CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

26.0   26.0   27.0   28.0   30.0   31.0   32.0   33.0   34.0   36.0   36.0   37.0   38.0   39.0   40.0   Total 17.0   To										CROTC	9	41 ( I K )			-	ł				ł	
10	24.0	25.0	26.0	27.1	H	$\dashv$	$\dashv$	30.0	31:	$\dashv$	Н	33.0	34.0	$\dashv$	$\dashv$	ᅱ	37.0	38.0	39.0	┥	O TOTAL
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47.0 46.0 46.0 47.0 46.0 47.0 48.0	0.84		L	-		-	L			,		_	L				L				11
46.0 46.0 46.0 47.0 48.0	9.0		-					-			,	2/		1		1/					2 /
46.0 46.0 47.0 48.0		1	L					L	2 /				_	/+	1/	1/					71 2
45.0 45.0 42.0 42.0 42.0 42.0 42.0 42.0 42.0 42			L			L			2 /	/2	<b>)</b> 9	1 3/	-		/1		/1				14/ 3
44.0         7         1         4         37         4         67         4         177         1         14         17         1         14         17         1         14         127         1         127         1         127         1         127         1         127         1         127         1         127         1         2         1<								3	-		L	L	_	2	/9	14	/2			<u></u>	40 / 2
43.0	⊥			<u> </u>		-	=	4				1 14/	۲	2/	12/	3/	2/				70 / 14
#2.0 #2.0	Ĺ			1	1/1	4/ 3	L	13		l.	_		ᆫ	5/ 1	/8	/9	3/	1/			
41.0				-	/ 2		L	1	١		Ц	_	_	1 /61	20/	12/	/*				188 / 4
40.0 39.0 39.0 39.0 39.0 39.0 39.0 39.0 3	_	\	_	2 /	-	4/ 12	8	Ц.			106		+		34/	797	76	2/	,	1/	339 / 10
39.0         1         6 / 30         22 / 41         46 / 42         114 / 32         136 / 21         160 / 6         131 / 2         80 / 1         36 / 11 / 2         1 / 7         1 / 7         3 / 4         1 / 7         4 / 7         1 / 7         3 / 4         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7         4 / 7         1 / 7	1			2 /	-	1.	13/	<u> </u>	/ 37	83/	116/		Щ			30/	1 9/	1/	,		571 / 153
7         1         7         3         67         22         67         34         39         69         46         166         36         164         3         99         1         36         16         47         17         1036         73         186         26         16         46         17         37         27         113         26         113         16         16         46         110         3         166         26         13         166         22         16         16         44         17         37         113         7         113         7         113         7         113         7         113         7         113         7         113         7         113         7         113         7         113         7         113         7         113         7         113         7         113         7         113         113         7         113 <t< td=""><td></td><td></td><td>3</td><td>1</td><td>3/ 14</td><td>/9</td><td>22/</td><td>↓_</td><td>42</td><td>114/ 32</td><td>3 /2/1</td><td></td><td></td><td></td><td>/08</td><td>1 36/</td><td>117</td><td>72</td><td>_</td><td>1/</td><td>785 / 19</td></t<>			3	1	3/ 14	/9	22/	↓_	42	114/ 32	3 /2/1				/08	1 36/	117	72	_	1/	785 / 19
7         1         7         2         7         2         13         12/34         19/54         78/36         160/21         242/13         244/4         4 184/3         110/4         30/4         17/3         30/4         1133/3           7         1         1/5         4/26         7/27         29/32         76/39         186/2         2170/1         1100/3         38/4         1/133/3           7         1         1/4         3/4         1         10/21         110/2         1100/3         110/2	98.0		-	l		3	38/	ᆫ	48	155/ 36		15 209/	_	l.	щ	1 35/	15/	/*		1/	1036 / 241
7         1         1/6         4/26         7/27         29/32         76/36/14         260/2         2/170/1         1000/3         36/16/4         1/13/1           7         1         1/4         3/6         10/21         23/23         66/13         110/2         168/3         169/1         146/2         20/6         6/7         1/12         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         11/2         10/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2         10/2         11/2	37.0	1 /	2	6	2/ 13	12/	19	L	/ 38	160/ 21	242/	13 244/	118		-	40%	121	3/		5/	1113 / 195
7         1         17         4         37         8         107         21         236         31         1107         9         1697         1         467         207         67         7         897         3         1697         1697         3         1697         3         1697         1697         3         1697         1697         3         1697         17         37         37         37         37         30	20.00	\	L	L	4/ 25	12	762	1_	/ 39	186/ 24	233/	14 250/		10/1	100/	38/	16/	/1		1/	1113 / 170
7         2         17         12         107         11         167         16         407         6         677         7         887         3         607         447         277         77         77         307         13         87         137         137           7         6         17         1         <		<u> </u>	-	l.		101	23/	_		6 /011	168/	3-1697	3 1	1 /61	/9*	20/	/9				\
7         6         9         6/3         3         1/2	1		L	2 /	1/ 12	201	16/	ட			_	_		14/	23/	11					. I
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	֡										֡										

1.83	2,45	STO ERROR	1.66	2.39
= (0.072)*HIP CIRC(IN)+(30.38)	= (0,129)*CROTCH HEIGHT(IN)+(32,83)	REGRESSION EQUATIONS	= (0.181)*HIP CIRC(IN)+(23.26)	2.48 0.260 = (0.374)*CROTCH HEIGHT(IN)+(26.35)
0.097	0.097		0.260	0.260
1.84	2.46	ST DEV	1.72	2.48
33, 05	37.09	MEAN	30.03	37,59
CROTCH HEIGHT	HIP CIRC	1977 ARMY WOMEN	CROTCH HEIGHT	HIP CIRC
	33.05 1.84 0.097 = (0.072)*HIP CIRC(IN)+(30.38)	33.05 1.84 0.097 = (0.072)*HIP CIRC(IN)+(30.38) 37.09 2.46 0.097 = (0.129)*CROTCH HEIGHT(IN)+(32.83)	33.05 1.84 0.097 = (0.072)*HIP CIRC(IN)+(30.38) 37.09 2.46 0.097 = (0.129)*CROTCH HEIGHT(IN)+(32.83) MEAN ST DEV R REGRESSION EQUATIONS	33.05 1.84 0.097 = (0.072)*HIP CIRC(IN)+(30.38) 37.09 2.46 0.097 = (0.129)*CROTCH HEIGHT(IN)+(32.83) EN MERN ST DEV R REGRESSION EQUATIONS 30.07 1.72 0.260 = (0.181)*HIP CIRC(IN)+(23.26)

TABLE 144

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND STATURE 1966 ARMY WAEN / 1977 ARMY WOMEN

	TOTAL	1	/6	11/	39 /	87 /	7 661	372 / 1	544 / 6	773 / 11	937 / 27	1043 / 60	870 / 80	751 / 115	476 / 193	235 / 191	135 / 194	58 / 183	32 / 122	8 / 80	1 / 36	/ 18	L /	-	١\	1330
	40.0		1-2	1-	11	2/		17																	6 6682	
	39.0		12	3/	/*	3/	2/	5/	1/	1/															2/2	1
:	0 38.0		¥	/*	15/	22/	31/	13/	/*	1/															94	
	0 37.0	=	1	2/	13/	38/	26/	28/	124	28/ 1	/6	72	/1												266	
,	0 36.0		2/	1	/*	12/	/89	/891	2 /111	/911	1 /17	23/	10/	1/											509	F
	.0 35.0				72	/9	762	1 /26	2 /113	6 278/ 3	9 208/ 5	131/ 6	1 /97	/11	/1	1 /									020	181
(N)	.0 34.0					72	10/	37/	102/ 2	2 216/ 6	9 371/ 9	on	212/ 10	1 176	10/	11	<u>``</u>								1391	38
CROTCH HEIGHT(IN)	32.0 33.0					/2	3/	10/	31/	79/ 2	237/	360/ 24 350/	9 241/ 33 377/ 36 212/	44 231/ 33	93/	9 /61	┡	72							1562	128
CROTC	31.0   32							2	/1	/61	68/ 3	136/ 9	241/ 33		43/ 32 158/ 81 158/ 57	70/ 28	_	2/2	L	L					930	130
	30.0			L						/9	12/	34/ 3	72/ 9	6 109/ 29 285/	158/81	85/ 74	/09	16/ 32	+						120	279
	29.0 30									/2	1/1	/9	10/1		1	33 / 48	36/	20/ 73	6	2/ 7		1 /			138	308
	28.0 28					ŀ						3/	72	11	9 /6	13/ 16	16/ 4	13/ 6	L	/9		/			2	7
	27.0 28															3/ 2	6 /9	4/ 13	L	72	\	6 / 0	[		22	104
	26.0 2															1-	1 >1	1/1	17	8 /	8 / 1	2 / 10	4 / 2		6	77
	25.0   20																		_		1/1	3 /			7	
	0.4	_								   						Ļ	T					Т	_			
,		28.0	200		ָ ֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֓֞	2 2	2000	20.02	25.5			7 1	L	ı	AT:	┸	0.00	0.00	05.0	200	200	200	8	97.0	200	1

STD ERROR	1.06	1,49	STO ERROR	0.88	1.30
REGRESSION EQUATIONS	= (0,579)*STATURE(IN)+(-6,73)	2.60 0.819 = (1.158)*CROTCH HEIGHT(IN)+(30.44)	REGRESSION EQUATIONS	= (0.579)*STATURE(IN)+(-7.08)	= (1.282)*CROTCH HEIGHT(IN)+(25.61)
œ	0.819	0.819	0 <u>4</u>	1.72 0.861	2.57 0.861
ST DEV	1.84	2.60	ST DEV - R	1.72	2.57
	33,05	68,71	MEAN	30.07	64.15
1966 ARMY MEN	CROTCH HEIGHT	STATURE	1977 ARMY WOMEN	CROTCH HEIGHT	STATURE

TABLE 145

A BIVARIATE FREQUENCY TABLE FOR CROTCH HEIGHT AND UPPER THIGH CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

	TOTAL		1/	14	10 / 4	26 / 10	100 / 26	233 / 48	486 / 136	816 / 253	1262 / 313	1378 / 253	1254 / 163	748 / 88	283 / 27	2 / 69	12/1	1/1	1330	
	40.0			L				Ŀ	L								L	Ŀ	200 100 100 100 100 100 100 100 100 100	<u>a</u>
	┡									/2	1/1	/1	11	>					6/	FRP
	38.0		-				1/		· /1		29	/9	/2	2/	·				2	STR FRAME
•	38.0	H		L	L	H	_	L	_	_					L		ŀ	H		
	37.0	$\prod$			2/	<u>                                     </u>	/*	/*	12	/91	/91	/91	/81	/6	2/				8/	
	H			1	<u>\</u>	3/	3/	16/	24/	22/	/99	/89	/91	22/	2	/1			2ge 2ge	
	36.0	H				3/	<u> </u>		-	7	7		/		/	3/	_		\ <u></u>	
	35.0	H		F	_	(2)	/11	24/	714 2	2 80/	101 9	3 130/	2 113/	72/	127	3	_		81	(f
	34.0			1	2/	/9	10/	38/	34/	7 122/	7 192/	11 2197	3 2027	102/	43/	/8		/1	20 20 20 20 20 20 20 20 20 20 20 20 20 2	LION
2	-		1/	/1	1/	/9	//1	37/ 4	9 /10					86/ 2	/19	18/	2/		391	REGRESSION FOURTIONS
CROTCH HEIGHTCIN	33.0		-	-	1 /	1	3	6	76/ 26 109/ 18 101/	1 92 /	2 88 /	7 23 2	/ 8 290/	/991 1	2		/ /	-	821	NU
TCH HE	32.0				1	2 4	26/	/99 8	56 109	37 178	36 301	37 280	28 261	8 159	719 2	10/	11		190	FSS
CRO	-				/1	/2	13/	762		/911	/981	222/	1847	109/	/98	11	/2		930	RFIG
	31.0				1 /1	2/2	7/ 9	17/ 10	40/ 28	73/ 66 115/ 37 178/ 26 161/	89/ 67 186/ 36 301/ 29 246/	14/ 48	93/ 38 194/ 28 261/	73/ 14 109/ 8 159/	29/ 6	8/ 2	1 /1		545	
	30.0					- 2	9	9	11/27	34/ 61 7	85	32/ 69 104/ 46 222/ 37 280/ 23 284/	24/ 29 5	24/ 22 7	S	1			308	œ
	29.0	Ц			1	/	3 4/	/6   6	20 11/	36 34/	23 46/	37 327	32 24/		701 0	3 4/			198	>
	-				/1	/1	1/	5/	10/ 2	10/3	10/ 6	18/3	8/3	1/1	1 /8	/			13/12	T DF
	28.0				1/			1/ 2	1 4	3/ 18	4/ 24	8/ 22	3/ 17	2/ 15	/ 1	/ 1			22 104	S
	27.0	+							+	9	9	7	9	8	2				34 2	MEDA
	26.0	1							/1	1 1/	3 2/			/	7.			e Sv	3/6	 
,	Н							1/	,	, , ,	,								1	2
	25.0	1									1								1	NY MFN
	24.0			Ţ				ل ـر	ل بر	L T	Ц Т				<u>ل</u> بر	<u>ل</u> ـر				ARMY
		33.0	0,0	200	1.	┸	Т.,	丄	L	L	⊥_	1	1	1	L	12.0	9	4	TOTAL	1966
						( N	Į)	J <b>ä</b>	13	H	01	ΗŢ	A	be	٩n					

1966 ARMY MEN	MEAN	ST DEV	<u>œ</u>	REGRESSION EQUATIONS	STO ERROR
CROTCH HEIGHT	33.05	1.84	1.84 0.013	= (0.012)*UPPER THIGH CIRC(IN)+(32.79)	1.84
UPPER THIGH CIRC	21.82	1.89	0.013	1.89 0.013 = (0.013)*CROTCH HEIGHT(IN)+(21.39)	1.89
1977 ARMY WOMEN	MEAN	ST DEV	· œ	REGRESSION EQUATIONS	STOERROR
CROTCH HEIGHT	30.07	1.72	1.72 0.184	= (0.177)*UPPER THIGH CIRCLIN)+(26.10)	1.69
UPPER THIGH CIRC	22.40	1.79	0.184	1.79 0.184 = (0.191)*CROTCH HEIGHT(IN)+(16.66)	1.76

A BIVARIATE FREQUENCY TABLE FOR FOOT BREADTH AND FOOT CIRC 1.966 ARMY MEN / 1977 ARMY HOMEN

O TOTAL		1/		/ 9	8 /	39 /	/ 68	204 /	622 / 1	731 / 6	1180 / 13	1149 / 27	02 / 686	806 / 201	447 / 213	225 / 283	177 / 273	48 / 166	24 / 65	17 / 22	1 /1	71	1330
$\vdash$		1/																					
┝					2/	2/	8/	11	2/	/1													22
H				29	/9	23/	46/	717	837	1 /04	26/	/9	/9	/9	2/								319
-					1/	13/	32/	108/	1 /082	361/ 4	1718	176/ 3	/89	1 /09	24/	/8	/8						1613
H						1/	3/	12/	137/	307/	2 /188	11 /999	487/ 32	268/ 34	88/ 10	20/	/99	12/					2793
H								/1	/01	22/	/601	2007 13	421/ 38	469/156	1272/151	120/132	_	20/ 7	1 /91	12/			1843 / 551
┝												2/	/9	22/ 8	48/ 52	44/143	Ш		1/ 18	4/ 3	/1	/1	182 526
-													/1	1 /	72	72	12 /2	** /	1/ 42	1/ 13	1 /		9 129
$\vdash$												,							* /	9 /			101
2.1	12.50	12 25	12 00	11 75	2 2	11 25	3 2	34, 6	10.50	10.05	10.00	20.00	9 50	200	000	25.00	2 2	8 2F	8 00	7 75	202	7 25	TOTAL
	2.76 3.00 3.26 3.50 3.75 4.00 4.25 4.50 4.75 5.00 TOTAL	75 3.00 3.25 3.50 3.75 4.00 4.25 4.50 4.75 5.00	.76   3.00   3.26   3.50   3.75   4.00   4.25   4.50   4.75   5.00	.76 3.00 3.26 3.50 3.75 4.00 4.25 4.50 4.75 5.00 1 1/2	.76 3.00 3.26 3.50 3.75 4.00 4.26 4.50 4.75 5.00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.76 3.00 3.26 3.50 3.75 4.00 4.26 4.50 4.75 5.00   1/2	.76     3.00     3.26     3.75     4.00     4.26     4.50     4.75     5.00       .7     .7     .7     .7     .7     .7     .7     .7       .7     .7     .7     .7     .7     .7     .8       .7     .7     .7     .7     .8       .7     .7     .7     .8       .7     .7     .7     .8	.76     3.00     3.26     3.75     4.00     4.26     4.50     4.75     5.00       .7     .7     .7     .7     .7     .7     .7     .8       .7     .7     .7     .7     .8     .8	10   3.26   3.50   3.75   4.00   4.25   4.50   4.75   5.00	15   3.00   3.26   3.50   3.75   4.00   4.26   4.50   4.75   5.00	15   3.00   3.26   3.50   3.75   4.00   4.26   4.50   4.75   5.00	10   3.26   3.50   3.75   4.00   4.26   4.50   4.75   5.00   107   107   107   107   107   107   107   107   107   107   107   108   108	10   3.26   3.50   3.75   4.00   4.26   4.50   4.75   5.00   TOTION   TOT	75         3.00         3.26         3.75         4.00         4.25         4.50         4.75         5.00         TOTI           10         10         10         10         10         10         10         10         10         100         100         1149         10         1149         10         1149         10         1149         10         1149         10         1149	15   3.00   3.26   3.75   4.00   4.26   4.50   4.75   5.00   TOTION   TOT	15   3.00   3.26   3.75   4.00   4.26   4.50   4.75   5.00   TOTION   TOT	15   3.00   3.26   3.75   4.00   4.26   4.50   4.75   5.00   TOTION   TOT	100   3.26   3.50   3.75   4.00   4.25   4.50   4.75   5.00   TOTION   TO	156   3.00   3.26   3.50   3.75   4.00   4.26   4.50   4.75   5.00	156   3.00   3.26   3.50   3.75   4.00   4.26   4.50   4.75   5.00	10   3.26   3.50   3.75   4.00   4.25   4.50   4.75   5.00	10	1, 12   3.00   3.26   3.76   4.00   4.26   4.50   4.76   5.00

1966 ARMY MEN FOOT BREADTH FOOT CIRC 1977 ARMY WOMEN	9.85 9.85 MEAN	ST DEV 0.22 0.58 ST DEV	0.710 0.710 R	REGRESSION EQUATIONS = (0.262)*FOOT CIRC(IN)+(1.29) = (1.924)*FOOT BREADTH(IN)+(2.40) REGRESSION EQUATIONS	STD ERROR 0.15 0.41 STD ERROR
T CIRC	8.90	0.45	0.847	(1.880)*F00T	

TABLE 147

A BIVARIATE FREQUENCY TABLE FOR FOOT BREADTH AND HEEL BREADTH 1966 ARMY MEN / 1977 ARMY WOMEN

	IO TOTAL		3 /	2 /	16 /	7 62	116/	. / 861	643 / 3	679 / 13	1504 / 44	1240 / 67	1405 / 190	665 / 357	121 / 288	63 / 268	92 / 9	26 / 3	2 /	1330	
	2 6.00						/1													1	
	10 4.75				11	11	14	/9	27	3.6	14	/1	/1							122	
	55 4.50		21	/1	/8	/8	112	38/	/99	1 /99	/69	271	/81	/9	7					319	
BKEHUIHI INI	10 4.25		/1	/1	/9	/91	64/	128	264/ 2	3 227/ 1	11 386/ 6	561/ 3	1 /0/1	714	/1	/1				1613	
FUUI BREH	16 4.00				/1	/1	787	/99	1 /6+2	4 292/ 3		27/ 16 339/ 36 694/ 13 261/	67/ 40   563/108   593/ 32   170/	72 /112	11 /48	2 /6	1 /1			88	
-	3.75				/1		2/	/9	/09	116	2 323/ 25 719/	38 /688	801/699	60/142 363/173 214/	111/19	27/ 70	L1 /E	<b>†</b> /2		1843	
	5 3.50							72	2/	6 /4	9/ 2	27/ 15	67/ 40	50/142	14/134	16/137	1/ 37	/ 16		182	
	3.25									1 /		1/	3/ 8	2/ 16	2/ 28	64 /	1/ 18	/ 10		9 129	
	3.00														/ 1		9 /	1 2	7 2	2	
	2.36	3 60	200.0	20.6	000	3 20	3.50	200	90.0	08.3	02.6	200	20.00	00.0	900	00.0	07.0	200	00.7	TOTAL	35
•		_	<del>-</del>	<u>.</u>		<u>.</u>	1	NI	)H	70	EB	98	7	33	Н	-	٠,				j

0.14	= (0.402)*FOOT BREADTH(IN)+(0.99)	0.503	0.16	2.40	HEEL BREADTH	
0.18	= (0.630)*HEEL BREADTH(IN)+(1.98)	0.503	0.20	3,49	FOOT BREADTH	
STO ERROR	REGRESSION EQUATIONS	œ	ST DEV	MERN	1977 ARMY WOMEN	
0.16	= (0.429)*FOGT BREADTH(IN)+(1.04)	0.499	0,18	2.70	HEEL BREADTH	
0.19	= (0,582)*HEEL BREADTH(IN)+(2,30)	0.499	0.22	3.87	FOOT BREADTH	
STD ERROR	REGRESSION EQUATIONS	<u>~</u>	ST DEY	MEAN	1966 ARMY MEN	

TABLE 148

A BIVARIATE FREQUENCY TABLE FOR FOOT LENGTH AND FOOT BREADTH 1966 ARMY MEN / 1977 ARMY WOMEN

	101 11			/22	319 / 1	1513 / 16	2793 / 98	1843 / 661	182 / 528	0 / 190		2	1830										
	2.7	ł	+	$\dashv$	-	4		-	$\vdash$	ł	$\dagger$	-	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \										
	12.50				1			L		1			-/						:				
ľ	2			2	3/	1/							7										
	12.26	+	+	-			L	┞	+	+	+		$\vdash$			•			7				
	12.00			2/	/01	/91	3						8/										
				4/	21/	22/	à						15						-	4.			:-
	11.75	H	-	_	2	2	F	+	$\dagger$	+	-		/	1	ROR	ന	٥	0	1	ROR	2	r	_
	11.60		1	/1	18/	22	È	1	3				2		STD ERROR	0.43	•	01.0	1	STO ERROR	0.42		71.0
				2/	62/	12		) }					381		STD				!	STC			
	11.25	H		H	9	2 17	127/	1	7	1	-	_	1			_						1	٠.
	11.00 11.25		Ĺ	9	129	1626	1200		); •	2		L	69			56		Q •			.07	ć	250
	E	1			24/	15/2	1		۰ ک	>			916	127		)+(	•	:	;		3+(5	•	
<b>\$</b>	10.75	-	-	$\vdash$	۲	30			2			$\vdash$	1	1		NI I		Ž			NI I		Z
OTHICE	09		L	1		1	200	2	325/	18/ 3	_	L	433	93	SNOI	ADT		E		NOI	ADT		GIH
FOOT LENGTH( IN)	10.25   10.60   10.75				,00	175/ 2 /100/ 2 /200 2 /200/ 2 /200/ 2 /1/2/	3/ 41/ 1 101/ 3 102/ 3 3/3/ 10 435/ 9 997/	1	160/110 281/107 424/ 83 395/ 43 322/ 15 123/	42/ 39 26/ 7	2/ 1		1239		REGRESSION EQUATIONS	= (1.286)*FOOT BREADTH(IN)+(5.56)		(0.227)*F001 LENGIH(IN)+(1.48)		REGRESSION EQUATIONS	= (1 290) #FANT BREADTH(IN)+(5.07)		[0.219]*F00T LENGTH([N]+(1.39)
ē	10.21	-	-	t	F		2	2	83	38	-	-	Λ	1997	E E	nnT	9 9	00		₩ Z	nnT	)	001
	10.00		L	ļ	è			136	1424/	72	2		1002	183	5510	S		7)×F		5510	0 ) * F	i '	¥(6)
					1	,		48/	81/10	28/ 61	2/ 6		203	2	GRE	28		3.55		EGRE	96 1	?	0.21
	9 75	; '	t	t	$\dagger$	t	1	7	110 2	30/111	E		1	240	ď	- 11		=		골	11		= "
	0 50		ļ	$\downarrow$	$\downarrow$		-	-	-	╘	6		267	293				41			-		31
	2	-				:	>	4 23/ 10	56/114	17/134	EE /7		, <u>[6</u>	~	œ	541	•	0.54		2	7		0.53
	96 0	٠	t	†	1	1		7	10/ 46	101/8	5	;	7	183	> !!			0.22		2	07	7	0.20
	0	3	+	+	+	+	1	-	17 10	8 67	1		2	2	ST DEV	, , ,	5	Ö		ST DEV	,	ċ	ö
	ŀ	4							1	-	ŀ		1	V			•	<u></u>				-	호
	┢	0, 0		T	1	1	1		1 /	2			1	<b>F</b>	NGT		10.01	3.87		MFRN	6	ח	3.49
	5	9.00	+	+	+	+	4	_	-	-	L	7	~/										
	,	97						`		-	ł	-	1	V	N	5		<u>x</u>	:	1977 DRMY WAMFN		_	Ξ
	ւլ	9.20		1		1				-	1		1		NAM WEN	- 2		BREADTH		.π Υ		5	FOOT BREADTH
		8.00	Ц		l	T	L	T	L	4	1	۲	$\frac{1}{11}$	7	ā			BR		a		ב ע	BR
	L		6.00	4.75	<b>6</b>	4.26	5		2	3.60	3.26	3.00	2.75	TOTAL	3301	7001	1001	FOOT	2	1977	7 6	ruui LENGIN	FOOT
	•	•		(1	N)	) H	10	<b>U</b> :	146		10	00	3										

TABLE 149

A BIVARIATE FREQUENCY TABLE FOR FOOT LENGTH AND FOOT CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

:	TOTAL	1		/9	10	39 /	/ 68	7 103	622 /	731 /	1 / 0611	1149 / 2	1 / 666	806 / 20	12/17	226 / 28	177 / 27	48 / 15	24 / 8	17 / 2	/1	/1	1330	
	12.75	$\parallel$	╀	┞	L	L	L	H	Н	L	H	L	L	Ц	Ŀ	L	H	L	L	H	L	L	8 <u>)</u>	
	Н							1/													١.		7	
	12.50	+	╀	┞	H	H	┝	H	H	H	Н	H		H	H	H	H	H	L	H	Н	H	$\vdash$	. :
	Н			=			2	/1	1/	/1													/	
	12.25	╀	╀	├	H	H	┞	Н		Н	Н	Н	H		H	H	H	┝	-	H	Н	H	$\vdash$	
	Н			╞	>	72	2	6	/9		3/	1/	/1					ŀ					30	*
	12.00	$\dagger$	+	┝	H	Н	Н	Н	Н	H	H	Н	_	Н	H	Н	H	$\vdash$	$\vdash$	Н	Н	$\vdash$		
	Н	ŀ			3	2/	/8	/*	/+1	8	/8	72	3/	72	/1								6	
•	11.75	†	$\dagger$	$\vdash$	H	Н	H	Н			_	Н		1		H	H	-	H	Н	-		7	<b>&amp; &amp;</b>
	-	=			1/	72	11	13/	28/	22/	24/	11	11	/9	/*	3/		·					2/	) ERRO 0,45 0,51 ) ERRO 0.40
	11.50	T	T	T	H	Н		Н		Н		H		Н	Н	-	_	-	Н	Н		Н		STD ERROR 0.45 0.51 STD ERROR 0.40
	Н		l	2		11	21/	31/	707	/69	/18	207	24/	/11	/9	/1	77						381	ST
	11.25	T	T			П				-	=	П		-		_		Г	Ė				1	
	11.00			-		13/	/11	/61	118	112/	118/	98/	/99	26/	/11	/9	/8	12					283	33
٠.	Ξ		Γ	Γ				7	. 1	1		1	, 6	3	, 1								12	28) 3.6 3.6
	10.75		L	L	-	/6	/8	/97	/96	168/	3 2197	136/		73/	186/	121	/21	/E					918	(6. )+( (3. )+(
£	10									l		1	9 /	/ 12	/ 3	2 /	1 /	/					31	S (IN (IN (IN
<b>BTH</b> (	10.50		L	L	2/	/1	/91	23/	/911	1221	/106 +	5 294/	215	140		_	23/	/9	/9	/1			<b>438</b>	100 111 111 111 111 111
FOOT LENGTHEIN						2/	3/		,			9 /	93/ 14 196/ 19 243/ 9 215/	1 27	9 /91 30 16/ 8	32/ 11	8 /	/1	3/ 1	3/			\_ <b>g</b>	REGRESSION EQUATIONS (0.433)*FOOT CIRC(IN)+(6.28) (0.562)*FOOT LENGTH(IN)+(3.93) REGRESSION EQUATIONS (0.648)*FOOT CIRC(IN)+(3.81)
FOOT	10.25	ļ	L	L	Ц	2	3	18/	87/	3 114/	4 228/	9 239/	1243	163	1 76			3 10/	3	_	Ц	Ц	238	E01  T (1  T (1
	_					1/	/1	/9			78	12	87 18	3/ 40	)/ 3(	33/ 44 61/ 30	42/ 17	10/	/9	/9			165	0N F00 F00 F00 F00
	10.00	╀	╀	L	Н	Н	Н		2	7	1 138/	167 7 2011	19	2 18	7 9	4 5			Ц		Н	Ц	1007	\$\$1 3)# 2)# 2)# 651 63#
	_							/2	2	/61	18/	/6	3/1	8/4	1 /9	3/ 4	17/ 24	11.11	- /2	/2			502	9RE . 43 . 56 . 56 . 54
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٠.									2	/8	12/	34/	31/12	86/ 35 118/ 42 183/ 40 163/ 27 140/ 12	43/ 66	27/63	23/ 40	? /9		4		7	267	11 11 11 11
٠	9.50	$\dagger$	$\vdash$	H	Н				+				2	30	**	73		34	13	•	_	-	283/2	R 493 493 R R 592 592
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	9.25	t	H	Г	Н				1				_	_	_	_	26	43	12	7			(8)	>
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	9.00	T		Г	Ī									-	6	14	30	23	20	9	-		8	ST
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	8.50	L	L		Ц															=				<b>E E</b>
	8																2	-	1	7			\=	Z
	8.25	$\downarrow$	L	L	Ц		Ц	Ц		Ц			_			Ц								Ž Ž
	Н																	1					$\backslash \rceil$	ARMY MEN LENGTH CIRC ARMY WOMEN LENGTH
1	8,00	Ļ	Ļ	Ļ		Ц	Ц	Ļ	$\downarrow$	ل	۲	$\perp$	۲	ل	┦	Ц	ل	Ļ	Ц	Ц	Ļ	$\downarrow$	ot	ARMY LENG CIRC ARMY LENG CIRC
ı		12.60	92.21	200	11.50	11.26	1	10.78	10.60	1.26	100	7,	50	3.05	0	2 2	8 E	20.0	200	12	7.60	1 25	10 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	6
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TABLE 150

A BIVARIATE FREQUENCY TABLE FOR FOOT LENGTH AND INSTEP LENGTH 1966 ARMY MEN / 1977 ARMY WOMEN

10000	LOIME	11	3 /	12 /	52 /	/ 981	419 / 2		1743 / 42	1699 / 112	848 / 180	687 / 361	208 / 300	37 / 218	18 / 87	12/		1	1330					
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	12.50	L	1	L										Ļ	L	l		1						
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	12.26	L	L	_	/9			Ц	Ц					L	Ļ	$\downarrow$	1	4			1			
			/2	18	ļ	/9	1/									1	l		) 0 1					
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				2/2	22/	28/	/9								l	1			ري					~
	11.76	$\vdash$	╀	┝	~	٣	-	┞	H	$\vdash$	Н		_	┞	ł	+	+	_	┝÷	1	STO ERROR	N 60		510 ERROR 0.19 0.15
				Þ	>	62/	20	>								١			121		m (	0.22		J ERR( 0.19 0.15
	11.60	+	╁	$\dagger$	╁	F	-	$\vdash$	t	H			$\vdash$	t	t	†	$\dagger$	-		1	STO			510
	Н				è	12	170/	1001	è	7				l		l			<u></u>					
	11.26	t	t	t	T	t	-	-	F	T	T		T	T	T	1	1		10	1		6		=
	8				١	15	1	8 288/	6 133/	13/	L		L	L					3/			1.9 12)		1.3 05)
	11.00	Ī	T	T	T	Ţ		1	ı	1					1				13	1		<u>+</u> :	,	) + ( (0.
	10.76		1	1	ļ	}	1	3 332/	7	786		L	1	1	$\downarrow$	4	4	_	3/2	1		2 +		N :
3							2	1	1-	2		è		١			١		<u>~</u>	2	£\$	(1,118)#[NSTEP LENGTH([N)+(1.90]		REGRESSION EQUATIONS (1.176)*INSTEP LENGTH(IN)+(1.31 (0.729)*FOOT LENGTH(IN)+(0.05)
FOOT LENGTH(IN)	10.50	$\parallel$	$\downarrow$	+	+	+	1	1	12.0	2 48	1 62/	+	┺	$\downarrow$	+	+	+	_	139	8	101	N P	;	LEN
37 1							1	1	2	2	1								8621		E S	_ =		EP I
50	10.26	$\parallel$	+	+	$\dagger$	+	+	f	-	10/ 14 344/ 43 635/ 45 467/	100	300	+	+	+	+	+	_	7	1991	REGRESSION EQUATIONS	STE NOT		REGRESSION EQUATIONS (1.176)*INSTEP LENGT (0.729)*FOOT LENGTH(
	$\Box$	$\ $		١				1/6			26	1	:	şļ:	뇜				18/		101			510 3 m 1 3 m 1
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	L	П									30/ 01 008/ 80 425/ 83 225/ 11	130/141 105/105 173/ 22 41/			8/ 4					240		11 11		11 11
	.60	$\ $	1	4	1	4	1	1	1	ľ	15	45		4	_	- 12	Ц	L	267			æ g	2	9 2 9 2
	L	$\ $							1			,		92/109	19/61	27			103	8	. ~	0.89	Ś	R 0.92 0.92
	9.25	H	+	+	╁	+	+	+	+	$\dagger$	+	1,	_	_		18	Н	H		183				
	F	$\ $		١	ł	۱		١		ŀ	<b>:</b>	┆	۱	9/ 63	6/103	>			2	$\sqrt{ }$	ST DEV	0.51	•	ST DEV 0.49 0.39
	9.00	H	+	7	†	†	1	†	†	†	†	ŀ	1	F	£3	47	-	l	T	넓	ST	_		ST
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	•					1	T	1	1	T	T		Ī	1	9	/ 26	01 /		V	43	MERN	10.54	:	MEAN 9.57 7.03
	6 50					$\rfloor$		1		1	1	1		_	-	L		L	Ţ	Ĭ		•		_
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	96					4	4	4	4	4	4	4	4	_	Ĺ	-	╀	ļ.	$\pm$	¥	Ē	ΞĒ	5	F 5
	┞	4																ŀ	小		¥	NG	ב ה	ZHY ENGI LEP
	9		H	Ц	Н	Н	T	T	T	1		1		Ţ	<u> </u>	1	_	_		۲	Æ	֓֞֜֞֞֜֞֓֓֓֞֓֞֜֟֜֟֓֓֓֓֓֓֟֡֓֓֓֡֓֡֟	ה ה	1977 ARMY WOMI FOOT LENGTH INSTEP LENGTH
	L	- 1	0, 0	36	3 8	35	8.50	8.25	8	7.76	7.60	7.26	2	9		9.50	8.26	6.00	5.76	10TA	1966 ARMY MEN	FOOT LENGTH	INSIEP LENGIN	1977 ARMY WOMEN FOOT LENOTH INSTEP LENOTH
	•	_	_1_		-1-	_	N2	11	110	N.	17	J3	118	N	1								•	-

TABLE 151

A BIVARIATE FREQUENCY TABLE FOR HAND BREADTH AND HAND LENGTH 1966 ARMY MEN / 1977 ARMY WOMEN

6 TOTAL	1,1		/ 9	8 /	41 /	121 /	415 / 1	1092 / 10	1509 / 56	1696 / 116	1343 / 281	430 / 338	916 / 16	28 / 176	16 /1	9 /	1899	1330
1.00 4.25				1/	/8	/01	13/	21/	/6	/1	2/						66	7
H	\ <u>`</u> -	,	- 2/	3/	/81	37/	746	/991	126/	/98	30/	3/					299	7
3.75			1/	/1	/*1	/89	249/	7 644/ 1	7 29 779/ 1	689/ 2	367/ 2	/69	29				2879	7
5 3.50					/1	/9	1 /49	2 245/ 7	534/ 29	93/ 63 725/ 44 689/	184/192 763/ 56 357/	8/110 125/196 225/ 33	44/ 14	/9			2606	183
0 3.25						1	72	16/ 2	60/ 25 534/	93/63	184/192	125/196	41/160	17/ 53	9 /		639	969
3.00								1	1 2	2/ 7	7/ 32	8/110	1/136	6/1/9	1/ 23	1 /	26	432
1 2.76													9 /	* /	3	-	1	13
2.50	→ 09.6	96 6		200	0, 0	0.00	07.0	20.00	9		92.7	2000	200	200	0.00	9.00	5.76	TOTAL

STO ERROR	0.16	0.32	STD ERROR	0.12	0.28
REGRESSION EQUATIONS	= (0.266)*HAND LENGTH(IN)+(1.51)	= (1.024)*HAND BREADTH(IN)+(3.90)	REGRESSION EQUATIONS	= (0.259)*HAND LENGTH(IN)+(1.30)	= (1.398)*HAND BREADTH(IN)+(2.56)
~	0.522	0.522	œ	0.602	0.602
ST DEV	0.19	0.38	ST DEV	0.15	0.36
MEAN	3,50	7,49	MEAN	3.08	6.87
1966 ARMY MEN	HAND BREADTH	HAND LENGTH	1977 ARMY WOMEN	HAND BREADTH	HAND LENGTH

TABLE 152

A BIVARIATE FREQUENCY TABLE FOR HAND BREADTH AND PALM LENGTH 1966 ARMY MEN / 1977 ARMY WOMEN

4.25 TOTAL		12 /	82 /	487 / 3	1995 / 70	2588 / 304	1228 / 593	273 / 336	16 / 54	1/1	6681
F		/1	/9	16/	22/	12/	3/				98/
1 4.00		/9	787	/96	2 206/	1621	/91	/8			299
0 3.75		2/	39/	2 2937	112/	78 996/ 2	366/ 2	/89			879
.25   3.50   3			- 8/	79/ 2	593/ 301		595/ 62 366/	120/ 11	10/	1/	183
3			1/	4/ 1	61/ 34 593/	192/1861199/	12/202 207/322 695/	71/147 120/	3/ 6		639 696
3.00					1/ 4	82 /9	12/202	6/169	2/ 18	/ 1	26 432
2.75							9 /	8			13
2.50	6.25 H	2.00	4.75	A 50	1 25	4.00	3.75	3.50	3.25	900	TOTAL

STD ERROR	STO ERROR
0.18	0.13
0.23	0.18
REGRESSION EQUATIONS (0.311)*PALM LENGTH(IN)+(2.21) (0.510)*HAND BREADTH(IN)+(2.38)	œ
31 11 & & & &	
R	R
0.398	0.483
0.398	0.483
ST DEV	ST DEV
0.19	0.15
0.25	0.21
MEAN	MEAN
3.50	3.08
4.17	3.89
1966 ARMY MEN	1977 ARMY WOMEN
HAND BREADTH	HAND BREADTH
PALM LENGTH	PALM LENGTH

TABLE 153

A BIVARIATE FREQUENCY TABLE FOR HAND CIRC AND HAND BREADTH 1966 ARMY MEN / 1977 ARMY WOMEN

									•		
	18781	1	AR /	567 /	9 / 02	2805 / 183	E30 / ROR	26 / 432	/ 13	\	
	50	3		١	2879	286				1989	
	10		>							7	V
	10.96		ŀ		-	-	H	<del> </del>	-	(	
	0.00		3	9	9	-	L	-	L	=/	
	9.75 10.00 10.95 1 10 50		1	121	/9					2	~ ~
	9.60		13/	30/	26/	1				89	STD ERROR 0.29 0.13 STD ERROR 0.05
	9.26	J	16/	143/	127/	13/				296	8TD 8TD
	9.00		12/	128/	308/	33/				181	.93
	8.76		/8	131/	/8/9	/18	/1			010	RECRESSION EQUATIONS [1.744)*HAND BREADTH(IN)+(2.40) [0.325)*HAND CIRC(IN)+(0.74) RECRESSION EQUATIONS [2.058)*HAND BREADTH(IN)+(0.93) [0.423)*HAND CIRC(IN)+(0.01)
(H)	8.60		/4	76/	41011/	1 438/	14/			1642	TONS RDTH() C(IN) TONS RDTH()
HAND CIRC(IN)	9.26			36/	2 516/	7 816/	41/	3/		11/2	REGRESSION EQUATIONS (1.744) #HAND BREADTH (0.325) #HAND CIRC(IN REGRESSION EQUATIONS (2.058) #HAND BREADTH (0.423) #HAND CIRC(IN
Ē	8.00	Н		>	167/		106/	72		080	SSION I) #HRN 5) #HRN 55 I ON 8) #HRN
	7.76	H			£3	44/ 81 400/ 86 762/	13 116/120 223/ 13 106/			<u>(</u> 2	REGRE (11.74.10.32)
	7.60				-	44 8	1116/12	2		169	11-11 - 11-11
	. 26					è	36/34	2		368	R 0.753 0.753 R R 0.933
	7.00					>		7/173		376	ST DEV 0.45 0.19 ST DEV 0.34
						ŀ		7.80		181	
L	6.76	Ì							•	73	MEAN 8.51 3.50 MEAN 7.26 3.08
Į.	9. 60		1	1	1	1			•	1	
	90 8.26	T	1	1		1		1	†	1	1966 ARMY MEN IAND CIRC IAND BREADTH 1977 ARMY WOMI IAND CIRC
	9	4.20	4.00	3.76	3.60	3.26	3.00	2.76	2.50	TOTAL	1966 ARMY MEN HAND CIRC HAND BREADTH 1977 ARMY WOMEN HAND CIRC HAND BREADTH
٠	7	N	1)	HI	OH	31	9	ON	BH		

TABLE 154

A BIVARIATE FREQUENCY TABLE FOR HAND CIRC AND HAND LENGTH 1966 ARMY MEN / 1977 ARMY WOMEN

	TATOL	4	-				121		. 1.	01 / 2001	1504 / 114	1373 / 201	102 / 007	430 / 338	917 710	28 / 178	17 31	9 /	6682	986	
	20 50	4	+	-	+	-	+	+		$\mid$	+		-	-	+	+			1		
	36 01 0	-		-		-	1/2		+	+	1		+		+	+			-1 -1		
	5 1 10,00	-	-			2/	/9	1	1	1/2	; >	-	+		+		+		2/		
٠	9.76	1		12	_	2	1/2	è	12	18,	2	2	ŀ		-		1	1	<b>8</b> /	3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	٠ (
	03.6	H	1/	3/	*	/11	26/	1 /18		t	T	-				$\mid$	+	1	$\overline{\ \ }$	STD ERROR 0.39 0.33 STD ERROR	
	9.26	H			-			l		H	30/							1	<u>క్ట్</u> \	, v	
	9.00				3/	/01	11/	/19	131/	Ē	82/	/97	7			F		+	<b>₹</b> \ \	4, 12) 92) 3, 40)	
	8.75		$\frac{1}{1}$		//	/*	29/	104/	240/	238/	183/	83/	/91	3/	L		-			(N) + (N) +	. 0) * (
( IN)	8.50			<b> </b>		>	<u>è</u>	103/	1 304/	1 419/	1411/	2 226/	/99	/1	L	_			2/2	REGRESSION EQUATIONS. (0.586)#HAND LENGTH(IN)+(4.12) (0.420)#HAND CIRC(IN)+(3.92) REGRESSION EQUATIONS	AL LUC
HAND CIRCLIN	8.26	+		-	-	2	2	42/	2 166/	3 343/	1 394/	2 368/	82/	1 12/	72	L	-		,	REGRESSION EQUATIONS (O.586) #HAND LENGTH(O.420) #HAND CIRC(IN REGRESSION EQUATIONS (O.563) #HAND LENGTH(	LC COSTANDING CIRCIAN LOS
<b>=</b>	8.00	+	$\downarrow$	1	-	+	>	1 21/	34/ 3 86/	7961 2	4 262/	915/	89/ 15 122/	8 22/	8/			000	00	SSION 6) #HAI 0) #HAI SSION 3) #HAI	3)*HD
	7.76		1	+	4	  -	2	2	2 34/	20/ 17 84/ 22 196/	2 /171 /		- 1	37/	7	1		867		REGRE (0,58 (0,42 REGRE (0.56	10 69
	2.50		1		1	1	1	- 1	_	_				_1	4/ 3	/		180	201	H H H	اا .
	7.26								>	∕ı.	ا۳	1	ZI:	⊾ I	5/ 25	1		1	N	R 0.496 0.496 R 0.592	0.592
ŀ	7.00							ľ	7	9	* 1	4/ 20	01/1	17114	2/ 56	1 8		101	376	ST DEV 0.45 0.38 ST DEV 0.34	0.36
ŀ	0.70									1	1	7		/0/	/ 62	11	/ 2	1	197	ST ST ST	_
-	┨					T	T				1					8	/ 21	1	73	8.51 7.49 HERN 7.26	6.87
-	0.00			l	T	T			T	T	T	T	(		<b>計</b>	1	-		1	Z Z	
20 9	-				T		T	T	1	T			-	†	$\dagger$			/	1	ARMY MEN CIRC LENGTH ARMY WOMEN	LENGTH
8	9.60	200	9,5	3		00.00	9.50	9.00	7.75	7.50	7.26	B	٥	99	6.26	0.00	5.76		TOTAL		HAND LE
•	Ľ	ľ	1	<u> </u>	ц,	(N		_		- 1	_	NU			"	•	5	Ι'		2. E. E. E. E. E. E. E. E. E. E. E. E. E.	Ĭ

TABLE 155

A BIVARIATE FREQUENCY TABLE FOR HAND CIRC AND PALM LENGTH 1966 ARMY MEN / 1977 ARMY WOMEN

	10101	4	, 6	/ 21	/20	487/3	1986 / 70	2589 / 304	1228 / 593	273 / 335	15 / 24	k	6682	1330		•			
	10 50	-	l	$\dagger$	†	†	1						7	1					
	10.25		l	+	1	+	1					-	/	1					
	10.00		-	1			*		-	_			=/						
	9.75	-	L	1	1		١	*					2/					•	
	9.50		2/2	1	16.	,;;	;		/2				69		RROR	. 22	RROR	0.30	0.18
	L		2/2	15/	78/	1031	,,,,						296		STO ERROR 0.41	0	STO ERROR	Ö	0
	9.25		2/2			Γ	T	t	†	à	+	1	$\int$						
	9.00		~	=	67/	197/	1867		36	<u>م</u>	-	-	<u>/</u>		5.34)	<u>(</u>		1.25)	00
	8.75			/61	112/	369/	308/				+		<u></u>		) + (N	+(2.3		N)+(N	+(1.8
8	8.50		2/	16/	/901	543/	3 607/	320		•	$\downarrow$		2/2		IONS FTH(I	(N)	ONS	THE	( IN)
HAND CIRCLIN	8.25		4	3	28/	4 376/ 1	2 624/ 3	1	1.	•	3				REGRESSION EQUATIONS (0.758)*PRLM LENGTH(IN)+(5.34)	10.232)#HRNO_CIRC(IN)+(2.20)	REGRESSION EQUATIONS	= (0.775)*PALM LENGTH(IN)+(4.25)	(O.288)*HAND CIRC(IN)+(1.80)
HAND	Ш			ž	27/			1	1			Ĭ	- F		ON E	HAND	ON E	PALM	HAND
	8.00	+	1	2	-	22/ 19 103/ 18 213/	58/ 78 282/ 48 436/	59/ 82 205/ 28 276/	-	T	+	Ĭ	8		₹ES\$1 758)#	#(2£)	RESSI	775)#	288)**
	7.75	1	1	~	=	19 103	78 282	82 206	20 587	-		180	\ 2 \ 2 \ 2		REG		REGI	:	
	2.50		+		_		97 68/	70 69/	72 29/ 20	<u>.</u>	  -	180		,	61	וו מ			ii D
	7.25	L				¥	12/	1/61	8	1		2			A 4	÷			<b>4</b> .
ŀ	00					8	2/ 26	4/193	2/113	1 6	>	2	376		ST DEV	0.7	ST DEV	0.34	12.0
ŀ	4			T	ŀ	1	=	/ 83	98 /	01 /		1	187		ST	•	ST		
ľ	e	_	$\mid$	$\dagger$	†	+	•	62 /	/ 34	+ /	1 /	1	13		MEAN 8.51		MEAN	02.7	7. O
9			L	l	+	+	-	6	-	-							<del>,</del>		**
90 9			L	-	$\downarrow$	$\downarrow$		\ -		1		\ -			A EN	:	MOMEN	, 2	
9		Ť			Ļ	Ļ	ŀ	1				,	1		SE ARMY MEN ID CIRC MIENGTH	?	ARMY	FACTE	ורונים. סו
L	6.25	90	3	2	2	4.25	4.00	3.76	3.50	3.25	3.00		TOTAL		1966 HAND	į	1977 I		
-		-	N	2)	HZ	4C	13	7	W7	Rd	1					•	~ 1	. 0.	-

A BIVARIATE FREQUENCY TABLE FOR HEAD BREADTH AND HEAD CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

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TOTOL		/		1	1		/		/ 13	10	96 /	/ 62	16	1149 / 147	174	7 206	827 / 229	/ 148	901/	17 /	/ 26	11	_		1330
		-			10	8	22	69	138	288	623	701	816	149	1008 /	792	627	290 /	161	71	26	O			1
	1													1	1										6682
200	H		-		<u> </u>	-	Н	_		-	_						H	_	Н	Н			Н		
F	$\mathbf{H}$	1					1/	11	21	21															4
8.75	·H	$\dashv$	4	-		Н	Н		Ц		L	L	Н	Н						Н			Ц		
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ç				1	2	1	2	7.	11	18/	188	24/	11	701	3/	3		1							138
6.60		ŀ	ı					-	2	3	١	2	*	9	*			1							30
2	$\ $				3	2/	13/	28/	61/	83/	137/	/811	117/	142/	83/	39.	18/	4/	2/	1/					88
6.25		٦				1			9	*	11	11	16	24	20	6	13	*	2						/81
6.00   6.25						14	7	28/	64/	129/	627	30 327/	1847	117	1847	201	1807	63/	22/	Æ	=				\$\ \$\ \$\
6.00	H	7	1	┪	_		1	2	9	2	12 262/	30	43 384/	86 441/	71 364/	74 220/	73 1	31	13	θ	-			-	431
	11					=	3	7	=	28/	101/	181/	. 1	19			_	116/	72/	23/	7	1		1	2303
5.75	H	+	+	+	-	$\dashv$	$\dashv$		-		1 9	9	27 262/	48 446/	140/ 77 412/	10 155/112 365/	16 161/126 274/	94 1	69		16	9	_	-	628 828
F	-		١	1				_	\	2/9	>	18/		2	7	6/11	1/12	103/ 8	67/6			6	$\overline{\ }$		960
6.60	H	4	4	4	_		4	4	4	4	4		_	9 106/	3 14	15	18	_			-	9		$\dashv$	
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<b></b>	26.	25.00	24.76	24.50	24 2F	2	23 75	23 50	23.25	23.00	20 JE	22 50	20.00	22.00	-			21.00	20 75	20.50	20.25	20.00	19 75	19 50	TOTAL
•	<b>L</b>		1.			_		Т.	1_	(1	17	135	170	1	H.	<del>!</del>	_			_				_	لــــا

1966 ARMY MEN	MEAN	ST DEY	œ	REGRESSION EQUATIONS	STO ERROR
HEAD BREADTH	6,01	0.23	0,525	= (0.191)*HEAD CIRC(IN)+(1.79)	0.20
HEAD CIRC	22,09	0.63	0.525	= (1,442)*HEAD BREADTH(IN)+(13,43)	0.54
1977 ARMY WOMEN	MEAN	ST DEV	œ	REGRESSION EQUATIONS	STO ERROR
HEAD BREADTH	5.75	0.21	0.548	= (0.180)*HEAD CIRC(IN)+(1.86)	0.18
HEAD CIRC	21.62	0.64	0.548	= (1.667)*HEAD BREADTH(IN)+(12.03)	0.54

TABLE 157

A BIVARIATE FREQUENCY TABLE FOR HEAD LENGTH AND HEAD BREADTH 1966 ARMY MEN / 1977 ARMY WOMEN

8.25 8.50   5.70   4.00		/1	/1							Ν	
9.50		\ -	1			•				/	V
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2	1		4/	23/	63/	221	ì	1		112	
┪			16/	/201	~	85/ 2	36/ 5			612	8
		/*	34/		18 /160	20 / 20	3 8	3		1	18
		2/	36/	l	347 98	201700	02/121	007 133	207 /07	V	300
				677 13 2	15/ 30 7	00 /04	1 41 /24	042/24	26 /21	1	475
	}		T	1		13/6/	- RR /10	1 891/68	2	$\mathbb{N}$	346
7.00	-		-	Ţ.	-1	"	1 22 /	77, 42		7	90
6.75	-		+	+	┤,  •	2 /	1/ 4	  -  -	+		13/
6.50			+	+	+		1	2/2/	+	+	<del> </del>
8.25	3	.00	3.76	3.60	3.26	00	1 36	2,60	5.26	5.00	TOTAL
	7.00 7.26 7.50 7.76 8.00	7.00   7.25   7.50   7.75   8.00	7.00 7.26 7.60 7.76 8.00	7.00   7.26   7.60   7.76   8.00   3.7   3.7   3.4   16/	7.00   7.26   7.50   7.75   8.00	7.00   7.26   7.50   7.75   8.00   1.75   1.00   1.75   1.00   1.75   1.00   1.75   1.00	7.00   7.26   7.50   7.75   8.00   1.75   1.00   1.75   1.00   1.75   1.00   1.75   1.00	7.00   7.26   7.50   7.75   8.00   1.75   1.00   1.75   1.00   1.75   1.00   1.75   1.00   1.75   1.00	7.00	7.00 6.26 6.60 6.76 7.00 7.26 7.60 7.75 8.00 7.00 6.76 6.50 6.00 7.2 24/ 8 173/ 21/ 362/ 6 261/ 6 107/ 13 262/ 6 224/ 15 286/ 6 000 6.00 6.00 7.2 24/ 8 173/ 27 446/ 38 734/ 26 724/ 15 286/ 6 000 6.00 6.00 7.2 1/ 4 24/ 26 161/ 99 442/141 762/121 718/ 39 166/ 6 000 6.00 7.2 1/ 7 7/ 42 63/169 182/240 303/133 234/ 30 36/ 6 000 6.26 7.0 1/ 12 6/ 43 16/ 46 28/ 16 14/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4	7.00   7.26   7.50   7.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   8.00   1.75   1.75   8.00   1.75   1.75   8.00   1.75

STD ERROR	STD ERROR
0.29	0.26
0.23	0.21
REGRESSION EQUATIONS = (0.137)*HEAD BREADTH(IN)+(6.84) = (0.087)*HEAD LENGTH(IN)+(5.34)	REGRESSION EQUATIONS = (0.201)*HEAD BREADTH(IN)+(6.21) = (0.129)*HEAD LENGTH(IN)+(4.80)
R	DEV R
0.109	1.26 0.161
0.109	1.21 0.161
ST DEV	ST DEV
0.29	0.26
0.23	0.21
MEAN 7.66 6.01	7.37 5.75
1966 ARMY MEN	1977 ARMY WOMEN
HEAD LENGTH	HEAD LENGTH
HEAD BREADTH	HEAD BREADTH

A BIVARIATE FREQUENCY TABLE FOR HEAD LENGTH AND HEAD CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

	10 TOTAL			1/	2 / 9	8 / 1	22 / 1	69 / 4	138 / 13	266 / 10	623 / 36	701 / 62	816 / 91	1148 / 147	1008 / 174	792 / 206	627 / 229	290 / 148	口	\	\	71 /6	-	-	1330	
	8.6					1/																			-/	
	0 8.75	  :	+	/1	1/	3/	/9	/+		/2	3/														02	
	8.60				3/	27	/6	247	32/	/81	141	11			72										112	
	30 8.25				1	2/ 1	1/2	34/ 1	87/ 3	124/ 1	173/ 3	106/	-	28/	12/	17									219	
TH( IN)	75 8.00						-	2 /2	38/ 6	109/	271/ 1	412/ 23	446/	422/ 12	180/8	76/	16/ 1	3/	1/	1/					1890	
HEAD LENOTHIIN	50 7.75								2/ 6	l		ᄪ	268/	49 629/ 76	496/ 71	362/ 42	187/ 15	41/3	13/	/+					200	
_	5 7.50							-			2 /8	14/ 6	1	169/	271/	2917	136/ 76 284/128	134/ 69		19/81	3/	3/			1274	$\sqrt{}$
	0 7.25										1 /1	72	1/3	-		•	136/				14/ 8	1 /8			284	340
	6 7.00															2/ 1	8/ 12	17/ 14	1		7/ 16	8 /2			æ/	
	6.7																		6 /	7 2	1/ 3	1/ 4		1	2/	2
	9.80																					-	-		1	N
	6.25	26.25	25 00	24.70	24.60	24.26	24.00	23.76	23.60	23.26	23.00	22.76	22.60	22.25	22.00	21.76	21.60	92:12	21:00	20.70	20.50	20.00	20.02	27.81	19.60	7
	•	<u></u>	1	 _1	1			1		1	N2	13	נעו	้ว	Ot	I3H	,									

ST DEV R REGRESSION EQUATIONS STD ER	66 0.29 0.788 = $(0.360)$ *HEAD CIRC(IN)+ $(-0.29)$ 0.	60	N ST DEV R REGRESSION EQUATIONS STO	0.26 0.796 = (0.326)*HEAD CIRC(IN)+(0.32)	62 0.64 0.796 = (1.943)*HEAD LENGTH(IN)+(7.31) 0.39
DEV			DEV		
MEAN ST	7.66		S	7.37	21.62
1966 ARMY MEN	HEAD LENGTH	HEAD CIRC	1977 ARMY WOMEN	HEAD LENGTH	HEAD CIRC

TABLE 159

A BIVARIATE FREQUENCY TABLE FOR HIP BREADTH AND HIP CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

A BIVARIATE FREQUENCY TABLE FOR HIP BREADTH AND WEIGHT 1966 ARMY MEN / 1977 ARMY WOMEN

	.5 TOTAL			3/	1		>	1,6	/ 0		, 01		/ 16	1 / 67	1 / 23		, , , ,	7		101 0	J.	⇃			434 / 16	\	584 / 58	I_	ı.	531 / 114	518 / 136	363 / 142	267 / 138	185 / 157	96 / 94	26 / 95	٠l٠	J۷	J۷	ŀ	,	1330
ŀ	19.6													-				Ī																					Ī	Ī	Ī	\\ \_
	2.0		$\vdash$	ŀ		$\mid$		$\mid$		l	$\mid$		$\mid$	l	+			$\dagger$	$\dagger$	$\dagger$	$\dagger$	+	-	+				_	-	_				_		-	l	ł	+	t	t	
	18.5		L	L	L		L		L	$\perp$	l	-	-	-	$\vdash$	$\mid$	$\perp$	1	$\downarrow$	+	+	+	1	-	-											L	L	-	<u> </u>	-	ļ	
ļ	18.0	L	L		L	L	L			L	L		L		L			L	$\downarrow$	1	$\downarrow$															L	L	L	L	L	L	
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HIP BREADTH(IN)	101		_			1/		76	3/		ļ	3/	>	1/2	14/	/9	_	<u>~</u>	-	L	,	†.  }	; ; ;	;; ;;	B	B /	2	=	115	16	=	9	9									102
IP BRE	10.0										L	_	L	L	-		-	Ľ		ľ		╬	+	٠,	- 1			21	8	22	27	22	=	7	-	1		H	-	L	_	166 64
¥ .				7	4	1/	4		2/	3	8	3/	8	16/	21/	16/	36	18	27/		19			1	┵	4	<b>&gt;</b>	16	) 8	38	42 /	1	7 92	23	=	2	2	-	L		L	248 203
-	┨1										3/	/9	2/9	/91	12/	31/	36/	29/	23/	201	2	2		100	4	4			٥			1					/	`				208
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10.5										J								Т					_	<u> </u>								Д	Д	╀	<b>}</b>	Н	ᅱ	2			ᆛ	<u> </u>
	280.0	276.0	270.0	265.0	260.0	266.0	260.0	246.0	240.0	236.0	230.0	22E.0	220.0	216.0	210	205	000	100		Ц,		_	_		166.0	160.0	156.0	160.0	146.0	140.0	136.0	130.0	126.0	120.0	116.0	110.0	105.0	100.001	96.0	80.0	96.0	TOTAL

0.46	13.51	STO ERROR	0.58	11.24
= (0.028)*WEIGHT(LB)+(8.62)	= (24.094)*HIP BREADTH(IN)+(-155.82)	REGRESSION EQUATIONS		= (15.591)*HIP BREADTH(IN)+(-84.92)
0.816	0.816	œ		0.801
0.79	23.35	ST DEV	0.96	18.76 0.801
13.07	159.10	MEAN	13.92	132.11
HIT BREHUIH	MEIGHT	1977 ARMY WOMEN	HIP BREADTH	WEIGHT
	EHUIH 13.07 0.79 0.816 = (0.028)*WEIGHT(LB)+(8.62)	13.07 0.79 0.816 = (0.028)*WEIGHT(LB)+(8.62) 159.10 23.35 0.816 = (24.094)*HIP BREADTH(IN)+(-155.82)	EHUIH 13.07 0.79 0.816 = (0.028)*WEIGHT(LB)+(8.62) 159.10 23.35 0.816 = (24.094)*HIP BREADTH(IN)+(-155.82 RMY WOMEN MEAN ST DEV R REGRESSION EQUATIONS	EHUIH 13.07 0.79 0.816 = (0.028)*WEIGHT(LB)+(8.62) 159.10 23.35 0.816 = (24.094)*HIP BREADTH(IN)+(-155.82) RMY WOMEN MEAN ST DEV R REGRESSION EQUATIONS SERDTH 13.92 0.96 0.801 = (0.041)*WEIGHT(LB)+(8.50)

TABLE 161

A BIVARIATE FREQUENCY TABLE FOR HIP CIRC AND UPPER THIGH CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

retal	11/	1	10 / 4	26 / 10	100 / 26	233 / 48	496 / 136	816 / 253	1262 / 313	1376 / 263	1264 / 163	748 / 88	283 / 2/	2	12/ 1	-	1930	. :
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			12	1 /9	2 /9	72					-						<u> </u>	STD ERROR 1.29 0.99 STD ERROR 1.05
1	ŀ	+	+	-	2	2	H	H	Н	-	-	4	-	$\dashv$	-	-	/ 8	11.29 1.29 0.99 TO ERRO 1.05
-			1	2	191	8	3	>									\$	8 18
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	1	+	ľ	,	11 20/	8 24/		-	-			Н	4	Н	Н		2 / 2 2 / 2	12.8
┨				1/6	23/		ı	13/	11	12							122	3 2 2
	Ī		T	١	1	116	/ 20	8 /									Z.	2. 47 2. 47 2. 47 2. 47
	1	+	-	ľ	2 18/	36/ 8 66/ 13 66/ 16 43/	63/ 15 154/ 45 128/ 46 64/ 20 31/	4 34/	7 324/ 70 126/ 27 30/ 6 15/	L				Н	-		88. \01	5T DEV R REGRESSION EQUATIONS 2.46 0.862 = (1.110)*UPPER THIGH CIRC(IN)+(12.87) 1.89 0.862 = (0.655)*HIP CIRC(IN)+(-2.47) 5T DEV R REGRESSION EQUATIONS 1.80 0.907 = (1.255)*UPPER THIGH CIRC(IN)+(9.48) 1.70 0.907 = (0.655)*HIP CIRC(IN)+(-2.78)
┨			-	:	2	65/	128/ 4	/ 88 213/ 72 100/ 34	30/	8	/1						330	REGRESSION EQUATIONS (1.110)*UPPER THIGH ( (0.655)*HIP CIRC(IN)* REGRESSION EQUATIONS (1.255)*UPPER THIGH (
	T	T	T	Ī	Ţ	8	45	7 72	1 27	9 /			1				7	URT TRC TRC TRC
	╀	+	╀	+	ľ	36	5 154	8 213	0 126	92 8	10/	ׅ֡֟֝֟֝֟֝ <del>֡</del>	2/	L	L		16	
				-		-	63/ 1	2 241/ 8	124/ 7	2 119/ 19 28/ 6	22/	/9	/1				786	01S 01S 01S 01S
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37.0	1	1	1	1	-	1	28/	155/	100/ 15 247/ 68 390/1:	327/	83/ 12 244/ 43 428/ 79 330/ 21 119/	701		3/	L	L	ĕ \	A 10 A 10
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TABLE 162

R BIVARIATE FREQUENCY TABLE FOR HIP CIRC AND WEIGHT 1966 ARMY MEN / 1977 ARMY WOMEN

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35.0	H	4	+	+	+	1	+	-	4		4	+	-	+	4	4	-	-	-	+	+	<b>-</b>		26/	67/	160	264	248/	222	4	1	l	_	24	2	11	2		`
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32.0	H	+	+	+	1	+	+	+	1	+	+	+	+	+	+	+	-		+	+	+	+	+	+	1	+	+	†	t	Ť		1	†	7	1	1	- 1		2
9:10	$\prod$	+	+	+	1	+	$\frac{1}{1}$	1	1	4	+	+	+	+	+	+	+	1	1	$\downarrow$	+	1	+	+	+		<u> </u>	<u> </u>	-	1	\$ ; 	)   	*	1	è	8	م -		]
2,00	Ц		$\downarrow$				1	$\downarrow$	1	$\downarrow$	$\perp$			1	$\prod_{i=1}^{n}$	$\downarrow$	$\downarrow$			$\downarrow$		1				$\perp$	1	1	_	]	1		Ļ	┦	ᆛ	}			
-	276.0	270.0	265.0	280.0	266.0	260.0	245.0	240.0	236.0	230.0	226.0	220.0	216.0	210.0	206.0	200.0	196.0	190.0	185.0	180.0	176.0	170.0	165.0	160.0	166.0	150.0	145.0	140.0	136.0	130.0	125.0	120.0	116.0	110.0	106.0	9	8		0

STD ERROR	510 ERROR
0.97	1.06
9.22	8.05
ST DEV R REGRESSION EQUATIONS 2.46 0.919 = (0.097)*MEIGHT(LB)+(21.66) 23.35 0.919 = (8.722)*HIP CIRCIN +(-164.41)	
R	R
0.919	0.903
0.919	0.903
ST DEV	ST DEV
2.46	2.48
23.35	18.76
37.09	MERN 8 37.59 132.11
1966 ARMY MEN	1977 ARMY WOMEN
HIP CIRC	HIP CIRC
WEIGHT	WEIGHT

TABLE 163

A BIVARIATE FREQUENCY TABLE FOR INSTEP CIRC AND FOOT CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

	14.00 14.50 TOTAL	/1		/9	/8	7 66	/ 68	1/ 204 /	622 / 1	731 / 8	1190 / 13	1149 / 27	04 / 666	805 / 201	447 / 213	225 / 283	177 / 273	48 / 156	24 / 65	<b>-</b>	1 / 1	1/	1 6682 1330	STO ERROR	0.48	0.43	STO ERROR	0.31	0.28
	13.00   13.50   1			-1																			\		+(3,13)	N)+(3.57)		+(1.57)	N)+(2.38)
	12.50	/1		1/ 2/	71 /2	12 /9	13/ 2/	/9	12/ 121	/8	/9	3/		2/									64 8	UNTIONS	(0.744)*F00T CIRC(IN)+(3.13	(0,601)*INSTEP CIRC(IN)+(3,57	URTIONS	(0.862)*FOOT CIRC(IN)+(	(0.705)*INSTEP CIRC(IN)+(2.38
C(IN)	11.60   12.00			/1	72	16/	28/			/89	44/	10/	12/	1/1	3/								301	REGRESSION EQUATIONS	14)*F00T	)1)*INSTE	REGRESSION EQUATIONS	52)*F00T	15)*INSTE
INSTEP CIRC(IN)	11.00				17 2/	4/ 13/	13/ 31/	197 797	1		9	367/ 3 126/	3	126/ 2 32/	78 1 796	13/ 3/	5/ 1/	/1	<u> </u>				1788 937	REGRE	= (0, 7)	)9'0) =	REGRE	= (0.86	= (0.70
	10.00   10.50						1/			9	1 407/ 7 44	6 438/ 12 36	330/ 18	89 309/ 31 12	131/8	58/ 1	347	1 2/	2/				82	œ	0.669	0.669	<b>0</b> ±	0.780	0.780
	1 09.6						11		/9	/ 12/	8/ 64/	/261 9	8	77 2647		61/168 82/ 62		32	9			-	538 275	ST DEV	0,65	0.58	ST DEV	0.50	0.45
	8.50 8.00									1	/	/21 /9	1/ 34/				16/132 62	/81 101/9	67 43 87	18 6 16			369 366	MEAN	10.46	9,85	MEAN	9.24	8.90
	8.00											/1				7 2	37 11	1/ 22	91 / 1 /	/ 3 1/ 12	1 /1	/1	4 8 63	RMY MEN	CIRC	. CIRC	ARMY WOMEN	CIRC	IRC
	2,50	12.00	12.20	11.75	0 0 0	11.00	00011	37.01	丄	L	130	┸		L	Ŀ	20.0	9 0	0.00	07.0	20.00	3 50	2 20	TOTAL	1966 A	INSTEP CIRC	FOOT C	1977 A	INSTEP CIRC	FOOT CIRC

TABLE 164

A BIVARIATE FREQUENCY TABLE FOR INSTEP CIRC AND HEEL-ANKLE CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

	14.50 TOTAL	4 /	/8	147	62 /	/ 96	1747	384 /	249 / 1	713 / 3	1030 / 11	964 / 22	983 / 48	768 / 108	477 / 146	247 / 166	150 / 258	56 / 204	14 / 172	7 / 119	2 / 49	/ 16	8 /	6682 1330	STD ERROR	0.50	05.0	STO ERROR	0.30	0.34
	H				11																			-/					_	
	14.00																									. 98			. 78	
	13.60					L																	L			+(1	75)		0)+	56)
	13																							7		(NI	(6.		[N]	щ.
	13.00	L						L		_	L							L		L	_	_	L	$\Box$		RCC	+ (2		RCC	+ ~
	$\dashv$	=	1	2/	77	3/																		6/	SNO	(0.631)*HEEL-ANKLE CIRC(IN)+(1	0.639)*INSTEP CIRC(IN)+(6.75)	ONS	0.698)*HEEL-ANKLE CIRC(IN)+(0.78	926)*INSTEP CIRCLIN)+(3.56)
	12.60	-					-		П														r		1116	K	13	111	K	CII
	12.00	2/	-	18	/8	/6	/11	/11	6	14	18		77			1				L				2/	EGUE	H-1	TEP	£008	H-1	TEP
	12,			/								/	1			Ĺ								7	NC	HEE	SNI	NO	HEE	INS
(N)	11.50	-		7	19/	23/	34/	/99	/09	/63	28/	1/6	/+		L			_		_			L	10k 10k 10k 10k 10k 10k 10k 10k 10k 10k	88 I (	1)×	9)	551	8)*	6 )*
INSTEP CIRCLIN	$\vdash$		3	14	12/	35/	/69	117/	168/	172/	181/	104/	18/	13/	14/	2							Ì	937	REGRESSION EQUATIONS	.63	. 63	REGRESSION EQUATIONS	.69	. 92
STEP	11.00	-			_	F	9	Ξ	1 16	2 17	3 18	4 10	2	3 1	-	H	H	H		-		_	$\vdash$	15 9	RE	0	0	RE	0	0.
-	$\dashv$		>	/1	/*	23/	20/	141/	189/	1387	6 337/	/60	/09	/19	106	14/	۵							1788		11	11		H.	11
	10.50	-						-	1	1 2	8	11 309/	17 250/	36 161/	8	4	$\vdash$					-	$\vdash$	- 22 - 28	~	0.635	635	œ	0.804	0.804
	80				11	3/	10/	46/	103/	205/	1698	1188	1386/	1282	1887	75/	33/	20	11	`				2019		0	0		0	0
	10.00										2	9 ,	22 /	39	82	54	53	10	3	-				275	<b>&gt;</b>	65	25	E K	20	23
	9.50				L			7	26/	36/	107	145/	245	30 240/	153/	93/	9	18/		2/2			L	722		0:	0:		0	0.5
	6								4/			1 /	. 1		١.	/ 89	38/160	16/103	1 72	/ 19	5			538	ST			51		
	9.00	_	L					L		11	Ê	18/	/61	1 83/	1 75/	8 51/		-	8 6	L	-	*		386	z	46	43	Z	24	12
	$\dashv$									1/	<b>\</b>	2/	/9	/6	/8	7/ 18	10/ 44	12/ 87	4/ 89	47 74	/ 31	,		953	MEAN	10	<u>ლ</u>	MEAN	ற்	12.
	8.50	-			-	H	H	H	H		$\vdash$		_		-	-	=	4	8	25	12	6	3	<u></u>			()	-7"		
	٥												11		21	\	ج	\	1	\	=	/	`	8	z		CIRC	MOMEN		CIRC
	8.8						$\vdash$		H				_				r	-		-	-	2		1	MEN	CIRC			CIRC	
	7,50																				`	/	1		ARMY		EL-ANKLE	ARMY		HEEL-ANKLE
	~	3 1	5 5	16 25	15.00	10.00	11.00	14.00	00.41	13 25	13. 60	300	00 51	10.00	2 2	10.00	3 6	11 75	00	20.11	27:11	10.35	0, 0	P.		INSTEP	<u>ا</u> ـ م		INSTEP	1
		20.01	10.70					┸	丄	1			┸		┸	丄	J.	2	-		1	-		10.00 TOTAL	1966	INS	HEE	1977	INS	HEE
								11	N].	13	HI:	j <u>;</u>	<u> </u>	YNÓ	<b>y</b> - '	73:	3H													

TABLE 165

A BIVARIATE FREQUENCY TABLE FOR PALM LENGTH AND HAND LENGTH 1966 ARMY MEN / 1977 ARMY WOMEN

26 TOTAL	/1	/9	/8	114	121 /	416/1	1092 / 10	99 / 6091	911 / 9691	1343 / 281	430 / 339	916/16	28 / 178	16 /1	9 /	6682 1330
0 6.25	/-	36	3/	18	/1	/1					·					12
6 5.00		3/	//	201	23/	26/	3/	3/								82
0 4.75			11	16/	707	180/ 1	180/ 1	34/	/9	1/						487
9 4.60				3/	112	190/	6867 9		132/ 30	48/ 3	1/					366
4.26						18/	214/	704/ 27 708/ 28	286/ 4 860/ 82 332/ 30		24 /29	2/ 1				2569 10
4.00							8/ 5	29 /99	86/ 49	1 687/128 634/149	119/ 20 248/274 57/ 45	36/169	1/ 18			1228 PE
3.75								4.7	12/  2	73/ 1 5	19/ 20 2	18/146	17/147	/ 21	1 1	336
3.50											6/ 11	/9	3/ 11 1	1/ 10	6 /	16 24 2
3.26													1/		1 /	-/- 
3.00	09.6	97.50	2000	0,0	200	07.0	7 75	2 50	2000	23:2	2000	0.0	2000	00.0	2000	TOTAL
			1		N.	2 14	476	אנ	37	Q)	W	4				ئــــــــــــــــــــــــــــــــــــــ

1966 RRMY MEN PALM LENGTH	MERN 4.17	ST DEV 0.25	R 0.822	REGRESSION EQUATIONS = (0.537)*HAND LENGTH(IN)+(0.15)	STD ERROR 0.14
HAND LENGTH	7.49	0.38	0.822	= (1.260)*PALM LENGTH(IN)+(2.24)	0.22
1977 ARMY WOMEN	MEAN	ST DEV	껕	REGRESSION EQUATIONS	STO ERROR
PALM LENGTH	3.83	0.21	0.908	= (0.526)*HAND LENGTH(IN)+(0.28)	0.09
HAND LENGTH	6.87	0.36	0.908	= (1.667)*PALM LENGTH(IN)+(0.77)	0.15

TABLE 166

A BIVARIATE FREQUENCY TABLE FOR SHOULDER CIRC AND WEIGHT 1966 ARMY MEN / 1977 ARMY WOMEN

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	7					-	-	1	) B.	1			2 (				121	161	200	245	313	200	1	552	7	680 / 62	5	Ē				è	2	è	2	2	81	/ E			6877	\									
67.0	-	†	<u></u>	T	T		-		Ī	İ	İ		1	1	1												Ī															1									
66.0			\$	†	T	T			İ	t	t	1	1		1												Ī		1	1	1	1										/									
66.0			+		t		-		+	,	†	/2	1	1										Ī	T		T	1													1	\									
64.0		H	+	<u> </u>	  -	<u> </u>	16	+		  -  -	+	1				1		-	-	l		l		İ	İ	1	1	1	1	1							T			T	,	.\									
63.0			+	+  -  -	$\dagger$		t	t	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	+	1	>	2/2			11	2/					t		t		1	1	1	+	1									$\dagger$	t	!										
62.0	+				+	+	1	+	$\dagger$	+	/2	+	4	8/	/9	2/	) }			;;		+	t		+	1	1	1	1	-						ŀ	T		t	T	1	<u>,</u>									
61.0	ŀ			+	1	ļ.	+	$\dagger$	+	1	+	1	_	H	-	$\vdash$	+	ł	$\dagger$	ł	t	+		+	1	1	+	1		-		_	H	-	-		$\mid$	ł		+	1	<u> </u>									
50.0	-	H		+	+	$\dagger$	t		1	1	1		Н	/8	r	H	t	t	t	t	t	†				1	1	-	-				L		-	-	+	1		$\dagger$	t	_									
48.0		H		+	+	-	١	+	1		1	/*	r	F	T	-	t	t	T	1	Ť	1	*	1				_			H	-	-	-		-	$\dagger$		1	$\frac{1}{1}$	7	<u>,</u>									
0.84					-	1	ŀ	2	+	*		/9	r	T	T	F	1	ŀ	1	†	1	1	1	1		/2	٦					L	-	-	-		1	+	1	1	7	<u>Z,</u>		0	7077	1.35	29.2	FRROR	1.17	0.38	
67.0			L		-	+	1		/2		7	73	r	t	t	t	t	t	†	†	7	~	1	1	1	è	_		/2						$\frac{1}{1}$	1	1			1	1	<u> </u>		21.0				STD	;		
- 1	$\ $	-	L	H		+	1	-	_	-	/1	L	-		-	1		t								/19						2	t	1		+	1	1	1	+		/ 80/	1			•	(7,838) #SHOULDER CIRC(IN)+(-190.11)			)*SHOW DER CTRC(IN)+(-160.82)	
SHOULDER CIRCLIN		<del> </del>	-			1	-				L	-					À :		)	32/	1 43/	7	Į	"		1 148/	-	196	9	Į.	l.	L	l.	$\dagger$		1	1	+	-			<u> </u>				_	91-)+0		ã	1+(-16	
3	41	+	-		L				_	L		-	-	;	1	-  -	*	┙	3	1	2 10/		3 64/		7071 6	10 186/		•	l۰	r		+		$\dagger$	+	1		-				١.	2			30.08	SCC IN	u	STOR EMORITORS A (27 09)	N. J. J. W.	
5	11	1	-							-	-		<u> </u>	1	Ì	\  -	1	=	2	Ì	1 8/	2 8/	3 20/	6 43/	1111	1 0/ 19 44/ 15 118/	18 1907	18 1827	14 177/	F 129/				À:	}		=					ı١	228		REGRESSION EQUALIONS	(18)+(	ER CIF	SANT TORON MOTO		7 2 2 2	;
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TABLE 167

A BIVARIATE FREQUENCY THBLE FUN STATURE AND BUSI/CHESI CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

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TABLE 168

A BIVARIATE FREQUENCY TABLE FOR STATURE AND HIP BREADTH 1966 ARMY MEN / 1977 ARMY WOMEN

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TABLE 169

A BIVARIATE FREQUENCY TABLE FOR STATURE AND HIP CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

	TOTAL	1			12	-	1	-		/07	707	122 /	/ 981	329 / 1	671 / 16	785 / 1	1036 / 24	1113/11	1113/17	720 / 1	380 / 1	137 /	34 /	14	133			
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STRTO	┪						1			1	/9			39/1	11 /04	96/1	77/ 33 115/ 19 149/ 15 161/	176/	183/	407 9 807 6 1117 7 1297 1 1247	ž	24/	۹		% %	REGRESSION EQUATIONS	(0.330) *STATURE(IN)+(14.42)	REGRESSION EQUATIONS 10.429)#HIP CIRC(IN)+(48.03)
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TABLE 170

A BIVARIATE FREQUENCY TABLE FOR STATURE AND SHOULDER CIRC 1966 ARMY MEN / 1977 ARMY WOMEN

Fig.   Fig.		101	3/		11	/8	111	/87	/ 09	140 /	7 082	194	/ 989	/ 988	1132/	10367	828 /	1 / 04.9	2/082	108 / 2	38 / 2	6/2	3/	-		\	133		
State   Stat		°.	+	$\vdash$	H	F	H	L	L	H	L	H	-	$\vdash$	L	L	L	L	$\vdash$	-	H	L	L	L	$\vdash$	L	8/		
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Fig.   Fig.		Н		=						=			>	3/	12	/1											•		
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Fig.   Fig.		76.0	1		H	L	L	L	$\vdash$	L	$\vdash$		-			_	L	F	L	H	H	L	ŀ	L	H	ŀ	[7		
Fig.   Fig.		0.9	L	L	=	L	=	L	3	3	12		8	11/	/1	/3	L	=	>	L		L	L	L	L	L	<u>*/</u>		
String   S		Н					12	è	12	/9	2	14/	18/	13/	11	/8	/•	>	/1								2		
Strategy   Strategy		74.	T	Ī		,		<u> </u>	_	ļ	ļ		Ž	1 /	1		_ /	1 /1	1			/				Ī	7		
Strain   S		73.0	$\vdash$	L	H	_	ŀ		Ľ	Ξ	=	51	35	32	36	=	13	L	_		1		L	L	_	L	<u> </u>		
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TABLE 171

A BIVARIATE FREQUENCY TABLE FOR STATURE AND SLEEVE INSERM 1966 ARMY MEN / 1977 ARMY WOMEN

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TABLE 172

A BIVARIATE FREQUENCY TABLE FOR STATURE AND UPPER THIGH CIRC 1966 ARMY MEN / 1977 ARMY WOMEN STATURE(18)

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**TABLE 173** 

A BIVARIATE FREQUENCY TABLE FOR STATURE AND WEIGHT 1965 ARMY MEN / 1977 ARMY WOMEN

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68.71 2.60 0.489 = (0.054) x MEIGHT(LB)+(60.12)	64.15 2.57 0.536 = (0.073)#WEIGHT(LB)+(54.51)
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68.71	64.15
159.10	132.11
HEN	MOMEN
1966 ARMY MEN	1977 ARMY WOMEN
STATURE	STATURE
WEIGHT	WEIGHT

A BIVARIATE FREQUENCY TABLE FOR UPPER THIGH CIRC AND WEIGHT 1966 ARMY MOMEN

	TOTAL	-		3 /	1/	/4	-	11	9 /	11./	/81	13/	21/	43 / 1	1 / 19	11/11	.2 / 85	121 / 1	9 / 191	200 /	245 / 8	313 / 10	378 / 8	434 / 16	552 / 30	V	680 / 62	630 / 87	531 / 114	518 / 136	N	N	7	╮	⇃	22 / 63	10 / 45	3 / 30	=	•	6677	1000				
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REGRESSION EQUATIONS = (0.084)\*WEIGHT(LB)+(11.30) = (9.243)\*UPPER THIGH CIRC(IN)+(-74.95)

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1977 ARMY WOMEN UPPER THIGH CIRC

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### APPENDIX

#### MEASUREMENT DESCRIPTIONS

### ANKLE CIRCUMFERENCE

WOMEN: the minimum circumference of the ankle.

MEN: same.

### ANKLE HEIGHT

the height of the level of minimum WOMEN:

circumference of the ankle.

MEN: not measured.

# BICEPS CIRCUMFERENCE FLEXED

WOMEN: the circumference of the arm at the level of the maximum protrusion of the biceps, measured with the elbow flexed 90°, the upper arm horizontal and the fist tightly

clenched.

MEN: same.

### BUST/CHEST CIRCUMFERENCE

the horizontal circumference of the trunk, WOMEN:

measured with the tape passing over the

bra points.

MEN: the horizontal circumference of the trunk,

measured with the tape passing over

the nipples.

# CROTCH HEIGHT

the vertical distance from floor to mid-

point of crotch.

MEN: same.

# CROTCH LENGTH

WOMEN: the surface distance from the waist

> directly above buttock protrusion, over the protrusion, and through the crotch to

waist level in the midsaggital plane.

MEN: not measured.

### FOOT BREADTH

WOMEN: the maximum breadth of the foot as

measured at right angles to its long axis.

MEN: same.

### FOOT CIRCUMFERENCE

WOMEN: the circumference of the foot measured

around the distal ends of the protrusions of the metatarsal bones (the widest part

of the foot).

MEN: same.

### FOOT LENGTH

WOMEN: the length of the foot measured parallel

to its long axis.

MEN: same.

# HAND BREADTH

WOMEN: the distance between the distal ends of

the metacarpal bones.

MEN: same.

### HAND CIRCUMFERENCE

WOMEN: the circumference measured around the

metacarpal-phalangeal joints.

MEN: same.

## HAND LENGTH

WOMEN: the distance from the wrist crease to the

tip of the middle finger, measured paral-

lel to the long axis of the hand.

MEN: same.

### HEAD BREADTH

WOMEN: the maximum breadth of the head above the

level of the ears.

#### HEAD CIRCUMFERENCE

WOMEN: the maximum circumference of the head

measured above the brow ridges.

MEN: same.

HEAD LENGTH

WOMEN: the maximum length of the head measured

from the most protruding point between the brow ridges to the back of the

head (occious)

head (occiput).

MEN: same.

HEEL BREADTH

WOMEN: the maximum breadth of the heel.

MEN: same.

HEEL-ANKLE CIRCUMFERENCE

WOMEN: the diagonal circumference of the foot

measured with the tape passing under the tip of the heel and over the instep at

the foot-leg junction.

MEN: same.

HIP BREADTH

WOMEN: the maximum horizontal breadth of the

hips.

MEN: same.

HIP CIRCUMFERENCE

WOMEN: the maximum circumference of the hips

at the level of the maximum posterior

protrusion of the buttocks.

MEN: same.

INSTEP CIRCUMFERENCE

WOMEN: the circumference of the foot at the

level of the metatarsal-cuneiform joint measured perpendicular to the long axis

of the foot.

### INSTEP LENGTH

women: the distance from the level of the heel to the point of maximum horizontal protrusion of the foot, measured parallel to the long axis of the foot.

MEN: same.

#### INTERSCYE BACK

<u>WOMEN</u>: the surface distance across the back between points located midway between the upper ends of the armpit creases and the tips of the shoulders.

MEN: the surface distance across the back between the upper ends of the armpit creases.

### NECK CIRCUMFERENCE

women: the circumference of the base of the neck; this circumference is <u>not</u> in a plane perpendicular to the axis of the neck.

MEN: the circumference of the neck measured just below the "Adam's Apple"; this circumference is measured on a plane slightly higher and closer to the perpendicular with regard to the neck axis than is the corresponding women's measurement.

# PALM LENGTH

WOMEN: the distance from the wrist crease to the skin crease at the base of the third finger measured parallel to the long axis of the hand.

MEN: same.

### SCYE CIRCUMFERENCE

<u>WOMEN:</u> the circumference of the scye (armhole)
measured with the tape passing through
the armpit and over the tip of the shoulder.

#### SHOULDER CIRCUMFERENCE

WOMEN: the horizontal circumference of the

shoulders at the level of the greatest lateral protrusion of the deltoid muscles.

MEN: same.

### SHOULDER LENGTH

WOMEN: the surface distance from the neck-shoulder

junction on the side of the neck to the

tip of the shoulder.

MEN: same.

#### SLEEVE INSEAM

WOMEN: the distance from the front edge of the

armpit to the little finger side of the wrist measured with the arm held slightly away from the body, palm forward and the

tape tense.

MEN: same.

#### SLEEVE LENGTH

WOMEN: not measured.

MEN: subject stands erect with his arms held

horizontally and bent at the elbows, fists pressed together in front of him. Sleeve length is the horizontal distance along the outer surface of the right arm from the middle of the back, over the elbow, to the center of the bony prominence at

the outer edge of the wrist.

# SLEEVE OUTSEAM

WOMEN: the distance from the tip of the shoulder

to the thumb side of the wrist with the arm held slightly away from the body,

palm forward and the tape tense.

MEN: not measured.

#### SPHYRION HEIGHT

WOMEN: the height of the most distal extension

of the tibia (the bottom of the ankle

bone) on the inside of the foot.

MEN: not measured.

#### STATURE

the vertical distance from floor to the

top of the head.

MEN: same.

#### UPPER THIGH CIRCUMFERENCE

the circumference of the leg measured at

the level of the lowest point of the gluteal furrow (point at which the

buttock meets the thigh).

MEN: same.

# VERTICAL TRUNK CIRCUMFERENCE

WOMEN: the circumference of the torso measured with the tape passing through the crotch,

over the protrusion of the buttock, the midshoulder point and the tip of the bra. The tape follows the contour of the body's

back but not its front below the bustpoint.

measured the same except that the tape generally follows the contours of the

body's back and front.

#### WAIST BACK

the surface distance from the "natural" WOMEN:

waist to the seventh cervical vertebra

(approximately at the base of the neck).

the surface distance from the waist (at MEN: the level of the navel) to the seventh cervical vertebra (approximately at the

base of the neck).

#### WAIST CIRCUMFERENCE

WOMEN: the horizontal circumference of the

waist at "natural" waist level.

MEN: the maximum horizontal circumference of

the waist measured at the level of

the navel.

# WAIST FRONT

WOMEN: the surface distance from the

"natural" waist to the neck-torso

junction on the front of the body.

not measured. MEN:

### WAIST HEIGHT

WOMEN: the vertical distance from the floor

to the "natural" waist level.

MEN: the vertical distance from the floor to

the upper edge of the right hip bone.

### WEIGHT

WOMEN: the weight of the subject wearing

underwear.

MEN: same.

### WRIST CIRCUMFERENCE

WOMEN: the circumference of the wrist at stylion

(wrist bone on the thumb side of the hand).

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Crotch Height	40	41	166
Hip Breadth	88	89	190
Hip Circumference	90	91	191
Interscye Back	124	125	-
Neck Circumference	126	127	-
Shoulder Circumference	92	93	192
Sleeve Inseam	94	95	193
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Waist Circumference with:			
Ankle Circumference	104	105	-
Bust/Chest Circumference	114		-
Crotch Height	118		
Crotch Length	-	149	-
Hip Circumference	122		-
Stature	132		•••
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